AN APPROACH TO HARMONY

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AN APPROACH TO HARMONY

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PREFACE

THE basic outline of "An Approach to Harmony" was developed in the harmony classes of the Chelsea, Massachusetts, High School in 1907. Two years later it was introduced into the harmony classes of the Eastern Session of The American Institute of Normal Methods, and since 1913 it has been used in both its Eastern and Western Sessions. Among the thousands of students who have studied according to this outline, many have introduced it into their high school harmony classes. The outline, therefore, has been thoroughly tested in the laboratory of the classroom under the most varied conditions. "An Approach to Harmony" appears in book form in response to the repeated requests of many teachers who have successfully used the outline in their classes, and have expressed the desire for a permanent text with which to facilitate and systematize their work.

The pedagogical plan of the book has been intentionally worked out with the definite idea of providing a background of harmonic experience, broadly adapted for use in high school, normal school, and junior college and preliminary to the more technical and vocational courses in conservatories and colleges. Hence, it will be seen that the course is addressed to students who are looking forward to music as a profession as well as to those who wish a cultural experience in the harmonic content of music. It leads the student naturally to an organized consciousness of the harmonic elements of simple music and to the ability to think tones in combination.

The language of the text is addressed to the student, and yet the book is not intended as a "self-instructor." The broad experience of a teacher will be necessary not only in detecting errors in the student's exercises, but also for the more important work of leading the student to find the application of his harmony studies in his musical experiences outside the classroom. In the Appendix will be found a detailed discussion of the teaching outline.

The musical illustrations have been taken from compositions which are familiar and accessible to most high school students. A survey was made of high schools throughout the country to discover the compositions most familiar to the students, first, from their music appreciation and music memory contest work, and second, from the compositions which they were studying in their piano lessons.

Standard terminology has been employed. It is the hope of the authors that many pupils may become so interested in the study of harmony through the use of this text as to wish to continue into advanced work. In this case a knowledge of the standard terminology will simplify their progress.

Several topics whose technicality suggests advanced rather than elementary harmony are treated very briefly; for example, secondary seventh chords. Certain advanced topics are omitted altogether; as, for instance, the various types of chromatically altered sixth chords. This course, being "an approach" to harmony, leaves for the technical harmonist the treatment of those topics which fall beyond the range of the ordinary music with which the student is acquainted. On the other hand, emphasis is early placed on non-harmonic tones and modulation because even in the simplest familiar music the student will find need for the ability readily to recognize these elements.

It is to be expected that every experienced teacher of harmony will have his own ways of presenting the course. While the book is in no way intended to limit such preferences, the authors have thought it helpful to outline in considerable detail lesson plans and suggestions for procedure in teaching this course. These will be found in the Appendix on pages 166–173.

One of the main purposes of the study of harmony is to lead the student to become sensitive to the harmonic beauties of music. This awakening comes not only through the development of a technical knowledge of harmony, but also from the stimulation of his musical imagination. Both should go hand in hand. The student is therefore required to express his own musical ideas in compositions not confined to the limitations of his early technical equipment.

The authors hereby express their indebtedness to the many teachers who by using the outline in their high school harmony classes have coöperated in refining it. Should the book prove to be the means of stirring the imagination and ambition of the students whose musical lives it touches, it will have accomplished the ideal held for it by the authors.

Osbourne McConathy
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Maude M. Howes
Charles E. Fouser

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INTRODUCTION

Before undertaking the study of music as outlined in these lessons you should acquire a thorough acquaintance with (1) the piano keyboard, (2) the names and relationship of the lines and spaces of the treble and bass staves, (3) the scales of the fifteen major keys, and (4) the key signatures of these fifteen keys.

(1) The Piano Keyboard

A diagram of the piano keyboard will be found inside the back cover of this book. In order to gain a good general knowledge of the elementary principles of harmony, you should acquire enough facility at the piano keyboard to enable you to play the simple exercises of this course. The relationship of the different pitches in music is graphically represented on the keyboard. In scale and chord building, therefore, the keyboard may be used conveniently as a means of measuring these pitch relationships by sight and by sound.

The first seven letters of the alphabet are used to name the white keys. Ordinarily the key named *c* is used as a starting point for finding the other keys; *c* is the white key immediately to the left of the group of two black keys. Next to the right of *c* is *d*, and then come *e*, *f*, and *g*. Next above (to the right) of *g* is *a*, then *b*, and next to *b* you will find a key which in relationship to the group of two black keys is identical with the key with which you started, and which will also be called *c*. In this way all the white keys may be named by the use of the letters *a*, *b*, *c*, *d*, *e*, *f*, and *g*.

Between the white keys, at various points, in groups of two and of three, black keys will be found. These take their names from the neighboring white keys. A black key may take its name from the white key to the left, in which case you would use the same letter and add the word "sharp." The word "sharp" is equivalent to "one half-step higher than." A half-step is the distance from any key to its next neighbor, black or white, up or down the keyboard. The black key next to the right of *c* would, therefore, be named "*c*-sharp."

Black keys may also be named by their relation to the white keys to their right. A black key is called "flat" in connection with the name of the white key next to the right. The word "flat" is equivalent to "one half-step lower than."

In some instances there is no black key between the two white keys, in which case the same rule for the use of the words "sharp" or "flat,"

indicating a half-step, may be applied. For example, there is a white key one half-step higher than *b*. This key may be called either "*c*" or "*b*-sharp." You should learn to name readily all the keys, giving two names to each black key, and also two names to the white keys which lie next to other white keys.

Occasion sometimes arises to use the terms "double-sharp," or "double-flat." In such cases the desired key will be found by reckoning two half-steps upward or downward from the key indicated by the letter used.

Practice until you can name all keys on the keyboard accurately and quickly.

(2) Names of Staff Degrees

The lines and spaces are called "staff degrees." Staff degrees are named by the first seven letters of the alphabet, corresponding in their relationship to the names of the keys on the piano keyboard. The names of the lines and spaces of the treble and bass staves, and the relationship of the two staves, is shown by the following diagram:

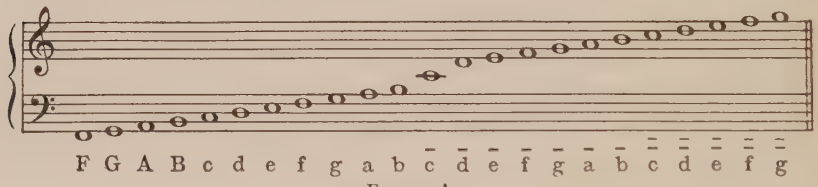


FIGURE A

Observe the manner in which the different octaves are indicated by capital and small letters, and by adding lines to the letters to indicate the higher octaves. Pitches above or below those represented on the diagram are represented by the use of "ledger lines," *i.e.*, added lines above or below the treble or bass staves.

By the use of sharps (♯), flats (♭), double sharps (𝄪), or double flats (𝄫) the lines and spaces may be made to represent pitches correspondingly higher or lower than those indicated in Figure A. To remove the effect of such "accidentals," and to restore the staff degree to its normal pitch indication, a natural (♮), or cancel, is employed. After the use of a double sharp, the effect of a single sharp would be indicated thus: (♮♯); after the use of a double flat, (♮♭). The effect of these signs may be graphically illustrated by a drill upon the relationship of the staff degrees and the corresponding keys of the piano keyboard.

(3) Scale Building

The diatonic major scale consists of a grouping of eight pitches from a given tone to its octave, according to the formula of Figure B. A step

or half-step is diatonic when two letters are employed to name two adjacent pitches. For example, *a*-*b*, *b*-*c*♯, *e*♭-*f*, etc., are diatonic steps; *c*-*d*♭, *g*♯-*a*, etc., are diatonic half-steps. A scale is called diatonic when only diatonic steps and half-steps are used in its building. In writing a diatonic scale the notes will appear upon adjacent staff degrees (lines or spaces).

To construct a diatonic major scale, begin with any pitch, write a note on the corresponding staff degree, then add seven notes on the successive degrees of the staff above the given degree. A sign indicating whether the distance from one pitch to the next should be a step or a half-step should be placed between each of the notes on the staff. Then you should place sharps or flats where necessary to effect the proper arrangement of steps and half-steps. Compute each measurement by referring to the keyboard diagram in the back of the book. (See Figure C.)

8 × half step
7) step
6) step
5) step
4 × half step
3) step
2) step
1) step

FIGURE B

It will be observed that the tones of the diatonic major scale are a step distant from each other with the exception of 3 and 4, and 7 and 8, where the distance is one half-step. This relationship is shown in Figure B. Drill in building diatonic major scales should be given as follows: write major scales

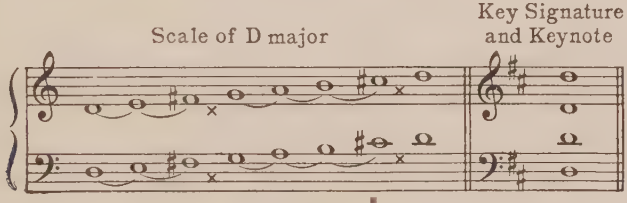


FIGURE C

from the following pitches, without signatures but with sharps or flats placed before the proper notes, using both the treble and bass staves: *c*, *g*, *d*, *a*, *e*, *b*, *f*-sharp, *c*-sharp, *f*, *b*-flat, *e*-flat, *a*-flat, *d*-flat, *g*-flat, and *c*-flat.

Each tone of the scale has its own name, as follows: 1. tonic, or keynote; 2. supertonic; 3. mediant; 4. subdominant; 5. dominant; 6. submediant; 7. leading tone.

(4) Key Signatures

In written or printed music it is customary to assemble the sharps, or flats, required in building the various scales, at the beginning of the staff, rather than to have them appear with each note. This grouping of sharps or flats indicates the key in which the piece of music is written and is called the *key signature*. In the circle of keys, Figure D, going clockwise to the right, you will observe that each succeeding key adds a new sharp to those required by the preceding key. This new sharp occurs on the fourth tone of

the scale of the preceding key, and is always placed as the last sharp to the right in the signature. In the circle of keys to the left, you will find that the new flat in each case is on the seventh tone of the scale of the preceding key. This new flat is always placed as the last flat to the right in the signature.

The circle of keys is a device for showing the relationship of keys. Beginning with C, and progressing clockwise to the right, we come in turn to the keys having successively one additional sharp in the signature. Progressing to the left, or, as we say, counterclockwise, we come to keys each having one additional flat in the signature. You will observe that certain keys overlap, and that such keys have as their keynote a tone which is sounded by the same key of the piano, as, for example, *c*-sharp and *d*-flat. The relationship of such tones is called "enharmonic," and means that while they are spelled differently they sound alike. An analogy is offered with the words "bear" and "bare," which sound alike but are used under different conditions because their meanings are different.

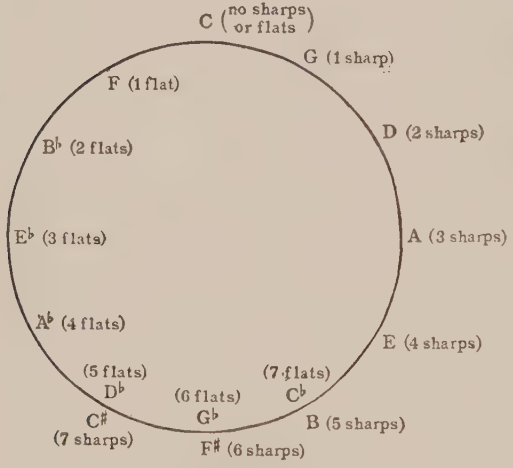


FIGURE D

AN APPROACH TO HARMONY

On the Beautiful Blue Danube. Strauss

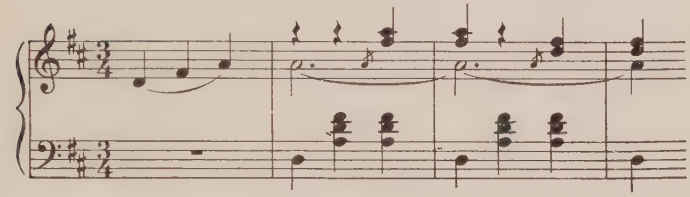



FIGURE 1

CHAPTER ONE

THE TONIC TRIAD

STEP ONE. *Chord Building*

I. Spelling Triads. In the above first phrase of Johann Strauss' ever popular waltz, "On the Beautiful Blue Danube," you will notice that the tones, *d*, *f-sharp*, and *a* occur, and these tones only. Hence, the entire tonal material of the phrase, reduced to its simplest form, may be expressed as shown in Figure 2.

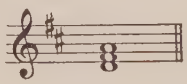



FIGURE 2

These tones are the first, third, and fifth tones of the scale of D major. The combination of 1, 3, and 5 of any scale produces what is known as the *tonic triad* of that key. The word *triad* means *three*, and, in music, *three tones*. The triad under consideration is called the *tonic triad* because it is built upon the keynote, or *tonic*, of the scale. The tone upon which a triad is built is called the *root*, and the other tones are known as the *third* and *fifth*, even though they may not appear in this order on the staff.

Every tone of the scale may serve as the root of a triad, the other two tones being found by counting upward to the third and fifth scale steps above the tone chosen as root. In the present chapter we are concerned with the tonic triad only. The other triads will be studied in later chapters.

Tonic triads are "spelled" by calling the *pitch names* of the scale tones 1, 3, and 5 of the given key. The tonic triad of the key of D major, for

example, will be spelled: "*d, f-sharp, a.*" [1–*a*][1] *Spell the tonic triads in all (15) major keys.*

II. Writing Triads. Although all the tones of the triad are present in the chord, as shown in Figure 2, the early studies of this course will be enriched by writing all chord exercises in the form of piano music, with one note on the bass staff for the left hand and three notes as close to each other as possible on the treble staff for the right hand. Written in this manner the chords are said to be in *close position.* (See Figure 3.) In designating the four tones of the chord so written, starting with the highest note, we shall use the terms, "First Part," "Second Part," and "Third Part" for the three notes on the treble staff, and "Bass Part" for the note on the bass staff. Since four parts are employed, one of the tones of the triad must appear in two parts. For the present, the root of the triad will serve as the bass note and, in addition, will appear in one of the other parts. This is called "doubling"; in this instance, "doubling the root."

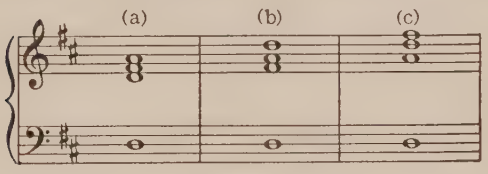


FIGURE 3

Any tone of the triad may appear as highest, or "melody tone," the other two notes of the triad coming below on the nearest treble staff degrees belonging to the triad. The spelling is not affected by these various appearances of the triad, *e.g.*, *d* is the root, *f-sharp* the third, and *a* the fifth of the triad wherever they appear in Figure 3.

[1–*b*] *Write the tonic triad in close position in the following keys, giving three examples in each key, one example with the root, one with the third, and one with the fifth as "melody tone." Keys of C, G, F, and B-flat.*

III. Playing Triads. It is of great importance that you should acquire an easy familiarity with the *feeling* of different chords on the piano keyboard.

In all keyboard work in classes, the students at their seats should play on facsimile keyboards the same assignment as the student at the piano. Chord groups similar to Figure 3 should be practiced in all major keys.

[1–*c*] *Play the tonic triad in all (15) major keys with root, third, and fifth in turn as melody tone.*

STEP TWO. *Harmonizing Melodies*

The opening phrase of "On the Beautiful Blue Danube," as shown in Figure 1, presents a wonderfully artistic treatment of a single chord, the tonic triad. Our early studies will treat the same triad in a much simpler fashion.

[1] Bracketed numbers, such as [1–*a*], etc., indicate the assignments within each step of the chapter. The figure indicates the step, and the letter the succession of assignments within the step.

If the melody were harmonized in close position according to the plan which we shall follow for a time, it would appear thus:

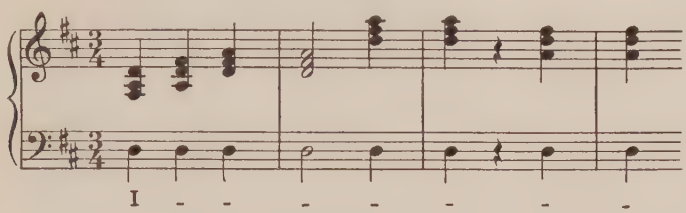



FIGURE 4

I. Written Work. *Certain melodies are now to be harmonized in close position.* In writing the harmonization of a melody the following procedure must be followed:

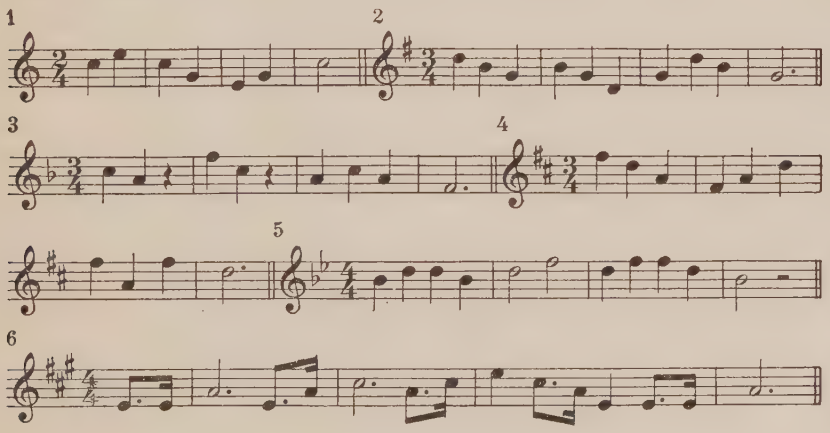
(1) Prepare the piano score of two staves properly bracketed, with correct key and time signatures, and with the melody written on the upper staff.

(2) Indicate by Roman numerals below the bass staff the chord to be used. At this point the tonic triad only, I, is involved. Observe in Figure 4 the way in which the triad is indicated by the Roman numeral, and also the manner of indicating repetitions of the triad by the short dash.

(3) Write the bass part.

(4) Add the inner parts below the melody.

For the Teacher: In assigning melodies for harmonizing, the teacher should frequently give them through dictation. The melody is played (or sung with a neutral syllable); the students sing it, beating the time; after which they write it. The authors recommend the use of the *so-fa* syllables in singing, although they are not essential, and neutral syllables, *fixed do* syllables, pitch names, or scale numbers may be sung.

EXERCISE 1. [2-*a*] *Harmonize the following melodies in accordance with previous instructions:*

II. Keyboard Work. [2–*b*] *Always practice playing your written work*, and be prepared to play your exercises readily in class.

After having harmonized several melodies on paper, [2–*c*] *harmonize similar melodies at the piano.* They should be played in the same form as the written exercises. You may play as slowly as necessary, but always with strict observance of the time.

A well-trained musician is able to transpose music readily from one key to another. You should practice playing the music of this assignment in all of the (15) major keys. In order to be steady in tempo and rhythm, it is well to play the exercises frequently as an accompaniment to the singing of your classmates or of another student, but when this is done you must exercise care to see that only keys are selected wherein the melody will lie well within the compass of the voices. (See Figure 5.)

[2–*d*] *As exercises in transposition use the melodies of Exercise 1 and the original melodies of your own invention* (*see Melodic Invention*).

STEP THREE. *Melodic Invention*

I. Invention. You will learn in this course how to develop your own gift for "melodic invention." The word "invention" is used because the restrictions imposed practically preclude that freedom of self-expression which might be termed "composition." Nevertheless, considerable latitude will be allowed for the exercise of good taste in even these brief melodies, and you should make every effort to produce tunes which will be interesting and pleasing.

(1) All fifteen major keys should be used in regular rotation, thus developing equal fluency in all keys.

(2) Melodies must consist of tones of the tonic triad only.

(3) The melodies must be written within the compass of *c′* up to *g″* because this is the usual limit of soprano voices. The idea of *singing* is the basis of all good melody, and you should sing all of your melodies, both individually and with your classmates.

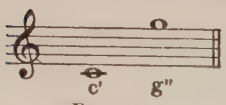


FIGURE 5

(4) All original melodies at this stage of the work should end with the keynote on an accented beat of the fourth measure; they may begin on either an accented or an unaccented part of the measure.

(5) A reasonable musical interest should be demanded of all your musical invention.

(*a*) The teacher may occasionally suggest the rhythmic pattern of the four measure phrase, as in Exercise 2.

(*b*) The melodies should *say something*, which may be brought about by suggesting the idea of "Question and Answer," or "Antecedent and Consequent." (See Figure 6.)

(*c*) The setting of poetic couplets, original or selected, greatly aids in establishing the feeling for form and definiteness, and is an excellent exercise for developing rhythmic feeling. (See Exercise 3.)

[3–*a*] *"Invent" a melody to each of the five following rhythmic patterns*

EXERCISE 2.

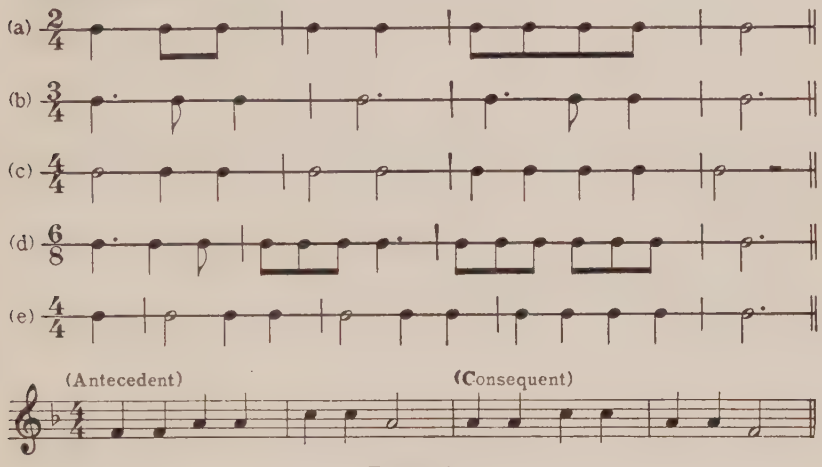



FIGURE 6

[3–*b*] *Select four of the following couplets and set them each to a four-measure melody.* Before setting the words to music scan the couplet to determine its rhythm.

EXERCISE 3.

(*a*) Now the moon comes up the hill,
Wide awake but dreaming still.

(*b*) On foot I gaily take my way
O'er mountains bare and meadows gay.

(*c*) Praise to God, immortal praise
For the love that crowns our days.

(*d*) I saw you toss the kites on high
And blow the birds about the sky.

(*e*) Summer has departed,
Gone are all her flow'rs.

(*f*) Good-bye, good-bye to summer,
For summer's nearly done.

(*g*) I should like to rise and go
Where the golden apples grow.

(*h*) The evening bells are calling
To still the toil of day.

II. Use of Melodies. You should keep all of your written work in a permanent music notebook. Your melodies may be used later as material for harmonizing on paper or at the keyboard, or as material for written or keyboard dictation.

[3–*c*] *"Invent" five melodies in accordance with the foregoing regulations and suggestions, each in a different key. Add harmonization to each.*

STEP FOUR. *Harmonizing Basses*

An interesting exercise consists in inventing a melody above a given bass. For more than two centuries this was the chief form of harmony study, and practically all the great composers laid the foundation of their musicianship by this procedure. At this point in our studies the exercise is, in reality, little more than an assignment in melodic invention, with a certain degree of rhythmic and tonal restriction. Exercise 4, No. 1, may be treated in many ways, of which three are suggested in Figure 7. [4–*a*] *Can you invent still another melody for the same bass?*

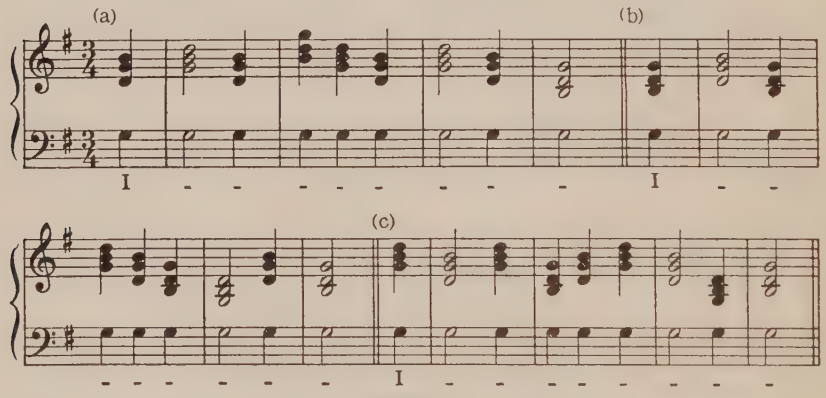


FIGURE 7

In several of the basses of Exercise 4, the figures 3, 5, or 8 will be found above the first bass note. This figure indicates the tone of the triad to be assigned to the melody as highest part. Where no such figure is given, you are free to choose your own melodic beginning.

I. Written Work. While the first assignments in this step are to be written, you should invariably play the completed exercise, with all possible transpositions, and should be prepared to play them readily in class. The melodies which you invent to these basses must be kept within the prescribed voice compass, c' up to g''.

[4–*b*] *Harmonize the basses of Exercise 4 according to the following plan:*

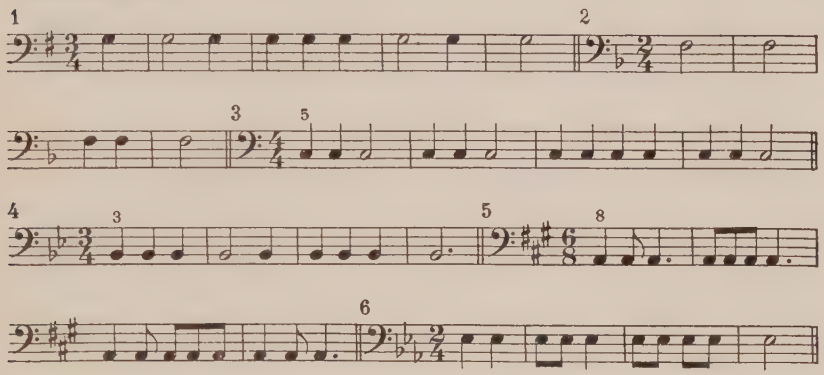
(1) Prepare the piano score of two staves, properly bracketed and with correct key and time signatures. Write the bass part as given in Exercise 4.

(2) Indicate by Roman numerals below the bass staff the chord to be used. At this point the tonic triad only, I, is involved. (See Figure 7.)

(3) Write the melody.

(4) Add the inner parts.

EXERCISE 4.



II. Keyboard Work. After completing several written exercises, [4–*c*] *practice harmonizing similar basses at the keyboard.* A brief time may be allowed to decide upon your melody, but your playing after once begun should be in steady time.

STEP FIVE. *Keyboard Harmony*

You will notice that in practically every phase of the procedure you are constantly required to *play* your exercises. Thus every step is a study of keyboard harmony. Keyboard fluency in chord playing is one of the most helpful assets of a real musician. Be sure to vary the keys, so that you will acquire equal facility in all of them.

I. Keyboard Drill. In addition to systematic practice at the keyboard as suggested in connection with the other steps of procedure, *prepare yourself to respond promptly to such demands as the following:* [5–*a*] *"Play the tonic triad of f-sharp major, the third as melody tone," etc., etc.*

II. Tranposition. [5–*b*] *Constantly practice playing all the material of the course in every possible key.*

STEP SIX. *Ear Training (Melodic and Harmonic)*

Music is a thing of sound, to be heard. Every topic studied should include repeated hearings, until you literally can "see with the ear and

hear with the eye." A musician should be able to write a melody or harmony which he hears or imagines. Under the heading, "Harmonizing Melodies," the suggestion was made that melodies frequently should be assigned by dictation. In addition to this there should be definite, systematized study of melodic and harmonic dictation.

I. Written Dictation. (1) *Melodic Dictation.* [6–*a*] *The melodies assigned for harmonizing (Exercise 1), and similar melodies, should be taken as dictation lessons.*

(1) The teacher plays the melody or sings it with a neutral syllable.
(2) The students respond by singing with scale numbers or syllables, keeping the time.
(3) The students write the melody.

(2) *Harmonic Dictation.* [6–*b*] *Harmonized melodies should be played and written by the students from hearing. Use melodies of Exercise 1 or similar melodies.*

(1) The student prepares a piano score of two staves properly bracketed, with correct key signature.
(2) The teacher plays the complete harmonized melody (if necessary a chord at a time).
(3) The student responds by singing the melody (only) with scale numbers or *so-fa* syllables, keeping the time.
(4) The student determines and writes the time signature and then writes the melody.
(5) The chords should then be determined and indicated by Roman numerals written below the bass staff.
(6) The notes for the bass part are written.
(7) The inner parts are added.

II. Keyboard Dictation. (1) *Melodic Dictation.* [6–*c*] *The melodies of Exercise 1, and similar exercises, should be used as keyboard dictation.* The teacher plays a melody and afterward the student plays it. The intervening step of singing the melody may occasionally be employed.

(2) *Harmonic Dictation.* [6–*d*] *The harmonized melodies of Exercise 1, and similar melodies, should be played by the teacher; the student should repeat them at the keyboard with complete harmonization.* If necessary, the intervening step of singing and playing the melody only may be taken, but you should endeavor as soon as possible to repeat the complete harmonized exercise. (Two pianos in the classroom are a great help at this point.)

Another form of harmonic dictation consists of the teacher's playing single chords and asking, "Is the root, third, or fifth in the melody?" Or the teacher may play a single chord, naming the key, and ask the student to play it from hearing.

The Proof of the Dictation Is in the Playing Thereof

As in the case of written dictation, the study of keyboard dictation presupposes a teacher who presents the problem and a student who solves it. Two students, however, will find a most stimulating and profitable experience in working together, alternating as "teacher" and "student." Also home study may be pursued by calling upon another member of the family to dictate material from the student's notebook. For the present lesson the material of Exercise 1 may be used. The fact that these melodies have been used before for several purposes will in no degree affect their usefulness here, even though the student may know them from memory.

STEP SEVEN. *Harmonic Analysis*

Chapter One treats of the tonic triad only. The study of harmonic analysis will be confined to this one chord and all other chords will be reserved for future consideration. Two types of music will be used for analysis, (1) hymn tunes and simple part-songs, and (2) piano compositions. It is desirable that in addition to the material assigned the class for analysis, you should also analyze the compositions you are studying in your piano, vocal, or other music lessons.

Any combination of notes which includes 1, 3, and 5 of the scale, and those tones only, however distributed or combined, is a tonic triad, and should be indicated by a I below the bass note. No present distinction is made of tonic triads in which a tone of the triad other than the root appears as bass tone (called "inversions" of the tonic triad). They also are marked with I. (See Figure 8.)

It is of the greatest importance that you *hear* every composition which you analyze. If you are not a pianist, play the piece as well as you can, very slowly, and listen intently to every chord. Whenever possible listen to the composition as played by others, trying to recognize every element which your studies have brought to your attention. Learn to listen understandingly at concerts and recitals, and use the talking machine, the reproducing piano, and the radio as means for the development of your ability to *know* what you hear.

An opportunity for discussion is offered by the appearance of the triad with the fifth omitted (occasionally the third). The question as to whether or not such a chord should be marked as I must be determined by playing the passage. If the musical effect is distinctly that of a tonic triad, mark it so. If there is uncertainty, omit the mark with the understanding that the chord in question will come up for future discussion.

I. Analysis of Hymn Tunes. In the hymn tune on page 10, "How Gentle God's Commands" (Figure 8), you will see the manner in which the

tonic triads may be indicated. Dashes after a numeral indicate a repetition of the same chord in succession.

"How Gentle God's Commands." Naegeli

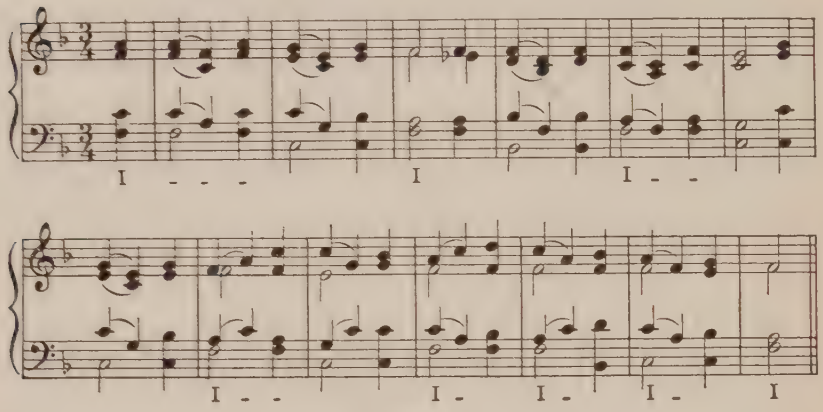



FIGURE 8

[7–a] *Indicate the tonic triads in at least four familiar hymn tunes.*

II. Analysis of Piano Compositions. In music written for four voices, such as hymn tunes, the discovery and marking of tonic triads is comparatively simple. Harmonic analysis of music written for the piano is more difficult. The tones of the chord often follow each other (arpeggios and broken chords) instead of sounding together, and the various rhythms also are likely to be confusing. If you will study carefully the various ways that the tonic triads appear in Figure 9 and the manner in which they are indicated, it will help you recognize tonic triads in other piano music.

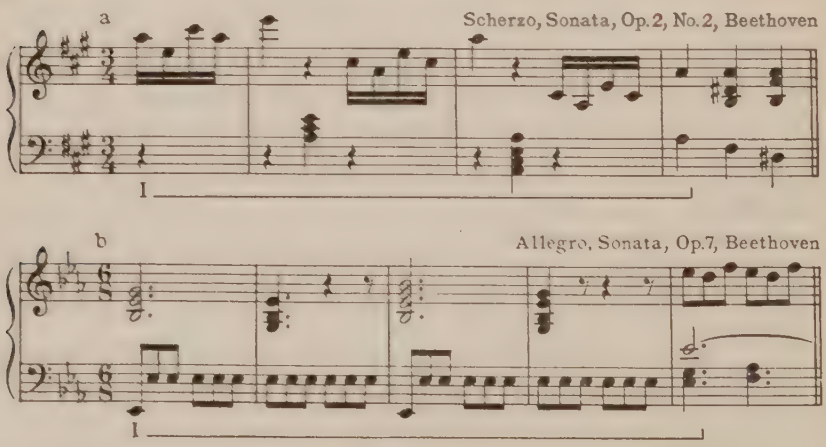


FIGURE 9

[7–b] *Indicate by Roman numerals the tonic triads in Figure 157 on page 164. Make also the same analysis of the composition which you are at this time studying in your lessons, or, if you are not taking piano lessons, of some composition assigned by the teacher.*

STEP EIGHT. *Free Composition*

[8–a] *At least once every month you will submit an original composition.* No technical restriction will be placed upon you in this assignment, merely the requirement that you write a song, a piano piece, or some other type of composition as you prefer. The piece need not be long, but should never be less than eight measures, preferably a minimum of sixteen measures. You will also provide for the performance of your composition before the class, playing it yourself whenever possible.

In criticising your compositions the teacher will observe the following considerations:

(1) You are not expected necessarily to show especial talent. The object of this assignment is to train you in ready and accurate self-expression in music. Consequently the teacher is first concerned with the question as to whether you have written what you intended, and that point must be determined by comparing your notation with your performance. The teacher will assist you in finding the correct notation for your ideas, but will not attempt to change the ideas themselves.

(2) As the various technical topics are developed in the course, you will be expected to observe the points which have actually been presented in the lessons, and the criticisms of your compositions will be extended accordingly to cover these topics.

(3) You will soon discover that your ideas are often so brief that your composition is only a fragment. The teacher will show you the absorbingly interesting way in which repetitions and contrasting ideas may be employed as the means of extending your thoughts to the dimensions of a real composition.

Overture, "Fidelio." Beethoven

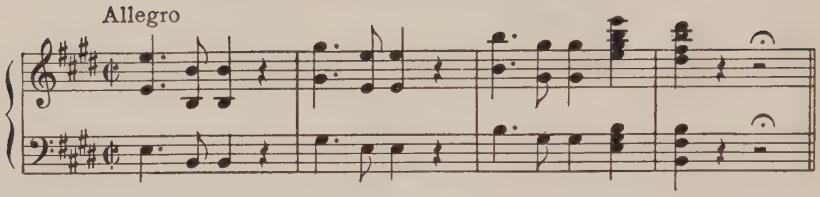



FIGURE 10

CHAPTER TWO

THE DOMINANT TRIAD

THE COMMON TONE PRINCIPLE

STEP ONE. *8–7–8*

I. Introductory Statement. In beginning the study of the dominant triad we would suggest that you first play the quotations from Beethoven (Figure 10) and Sullivan (Figure 11). Then turn to Exercise 5, No. 1, and experiment at the keyboard with a harmonization of it.

For the Teacher: In class work it would be well to write Exercise 5, No. 1, on the board, so that the students may see it while they are trying their harmonizations.

You will soon realize the need of a new chord to harmonize the last tone but one. Particularly with the Beethoven and Sullivan excerpts before you, your experiments will soon lead to the following discoveries:

(1) The best chord with which to harmonize 7 of the scale is the triad built on 5, consisting of the scale tones 5, 7, 2.[1]

(2) Since this triad has the dominant or fifth tone of the scale as its root, it is called the dominant triad, represented by the Roman numeral V.

(3) In connecting the tonic and dominant triads the root of each is played as the bass tone, the other tones progressing with as little motion as practicable. The melody is 8–7–8; the second part is 5–5–5; the third part

[1] Many students will instinctively use the dominant seventh chord. They must be told that, although this chord is quite correct, consideration of it is postponed until later because we are now studying triads, or three-tone chords, only.

is 3–2–3. Thus three melody patterns are combined in this chord progression, and you should always think of each part as progressing melodically.

(4) The tonic and dominant triads have one tone in common, 5, which appears in both chords in the same (second) part.

O Hush Thee, my Baby. Sullivan

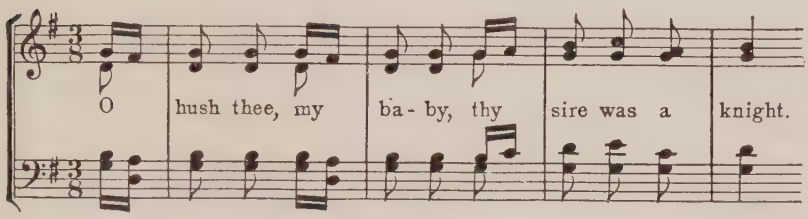



FIGURE 11

Your experience may be reduced to the following statement:

The dominant triad is an *active* chord. Its root is the dominant tone of the scale, 5; its third is the leading tone, 7, the strongest of all the active, or tendency, tones; and its fifth is the supertonic, 2, also a strongly active tone.

The progression of an active chord into one less active is called its *resolution*. When the resolution occurs at the close of a phrase, it is called a *cadence*. In this course, such a progression appearing within the phrase is called a *cadential progression*. (See Figure 12.) When the dominant chord resolves into the tonic at the close of a phrase, as in Exercise 5, No. 1, the result is a strong effect of finality, called the *authentic cadence*.

Since all music consists of the artistic balance of the active and passive principles, this course in harmony will be devoted largely to a study of cadences and cadential progressions.

In elementary chord progressions, the use of tones common to two different chords is governed by a rule which requires that the common tone be retained in the same part in both chords. The other tones progress to their nearest neighbors in the second chord. To show that you recognize them, you should indicate the common tones by means of ties. (See Figure 12.)

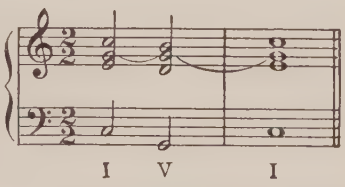



FIGURE 12

When playing your exercises, sound each chord separately, recognizing the tied common tone by playing it each time with the same finger.

II. Chord Building. [1–*a*] Playing and writing.

(1) **Spelling Triads.** *Spell the dominant triad in all (15) major keys.*

(2) **Writing Triads.** *Write the melodic pattern, 8–7–8, in a chosen key.*

First indicate the chords by the Roman numerals, I–V–I, written under the notes and below the bass staff. Now write the bass notes, using the roots of the chords. Then write the inner parts of the first chord as directed in Chapter One. Next find the common tone, which in these exercises is 5 of the scale, appearing in the second part. Write it for the dominant triad, and connect it by a tie with the same tone in the preceding chord. The only other tone of the dominant triad will be 2 of the scale. Write it in the third part.

In order to complete the progression the chord V will be followed by I. First place and tie the common tone, then write the note for the remaining part. *Continue writing progression in remaining (14) major keys.*

Whenever the melodic pattern 8–7–8 appears as melody, it may be harmonized by I V–I according to the above procedure. (See Figure 12.)

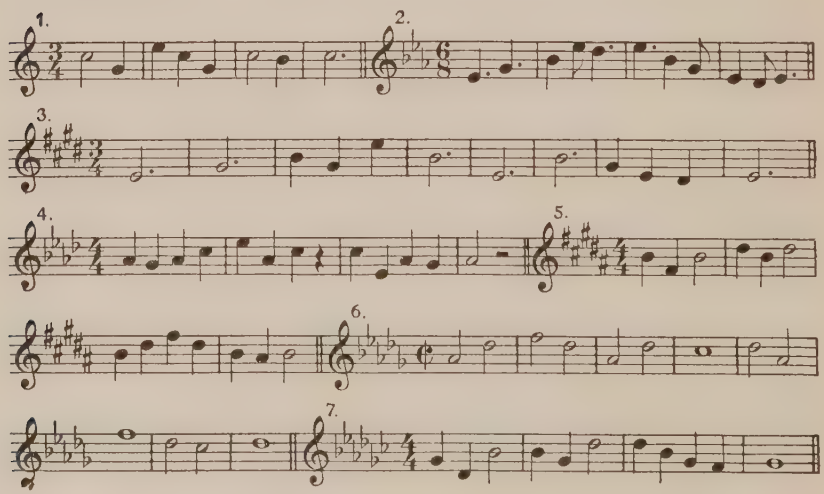
(3) **Playing Triads.** *Play the melodic pattern, 8–7–8, harmonized by I–V–I, in all (15) major keys.*

III. Harmonizing Melodies. [1–*b*] *Harmonize the melodies of Exercise 5 in close position.* (See page 2, **Writing Triads.**)

(1) **Written Work.** Follow the directions in Chapter One, page 3. Always indicate the dominant triad by a V below the bass note. All the melodies of Exercise 7 end with an authentic cadence, and in most of them you will find the melodic pattern 8–7–8 used also as a cadential progression. When a phrase ends with the dominant triad, as in Exercise 5, No. 6, fourth measure, the effect is unfinished, and the progression is called a *half cadence.* The Beethoven quotation at the beginning of this chapter, Figure 10, ends with a half cadence, which was the composer's way of suggesting the dramatic effect of suspense and uncertainty.

(2) **Keyboard Work.** As directed in Chapter One, page 4.

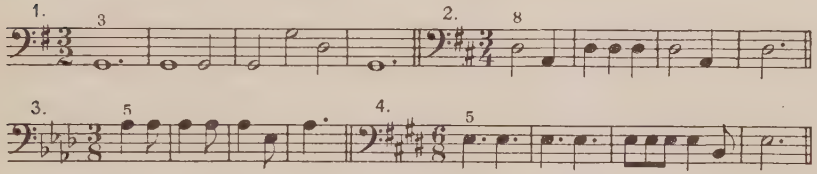
EXERCISE 5.



IV. Melodic Invention. [1–*c*] *Follow the directions in Chapter One, page 4.* Your first melodies should include the melodic pattern 8–7–8 as closing cadence only, but later this pattern may also appear at other places in the melody, *i.e.*, as a cadential progression. It would be advisable for you to confine your invention to four-measure melodies until directed otherwise.

V. Harmonizing Basses. [1–*d*] *The basses of Exercise 6 are for both written and keyboard work.* The harmonic progression I–V–I calls here for the melodic pattern 8–7–8, although the use of 3–2–3 and 5–5–5 is not forbidden.

EXERCISE 6.



VI. Keyboard Harmony. [1–*e*] *Follow the directions for this form of study given under II (3), page 14.*

Constant keyboard application should be made of every step. Frequently practice transposition of all assignments.

VII. Ear Training. [1–*f*] The material of this chapter should be used for written and keyboard dictation in accordance with the directions in Chapter One. Another helpful form of keyboard dictation which may be introduced at this point consists of the teacher's playing an exercise slowly while the students indicate the successive chords by Roman numerals.

(1) *Written Dictation, melodic and harmonic.*
(2) *Keyboard Dictation, melodic and harmonic.*

VIII. Harmonic Analysis. [1–*g*] Our new topic in analysis is the dominant triad, V. The discussion of this procedure, **Analysis,** given in Chapter One, page 9, should be reviewed and applied to the new topic. The same hymn tunes and piano compositions in which you discovered and marked the tonic triads may again be used to locate dominant triads. They should be marked with a V below the bass staff. All analysis should be associated with the *hearing* of the composition, homework being done at the keyboard, classwork with a student or the teacher at the piano. Numerous examples of the dominant triad will be found in the illustrative quotations of this book.

IX. Free Composition. [1–*h*] The directions given in Chapter One, page 11, will continue to apply throughout the course. You should exercise your utmost freedom in musical self-expression. The teacher's criticisms of your work will be directed along the following lines:

(1) Aiding you to find the correct notation for your ideas.

(2) Requiring the accurate observance of technical matters *already studied* in the course, but largely ignoring other technical inaccuracies.

(3) Assisting you to expand your ideas by the use of conventional devices for the structural development of your composition.

(4) Encouraging you to review thoughtfully your own work with self-criticism on an increasingly higher plane of taste and musical judgment.

[1–*i*] A second assignment in free composition should be undertaken while the work of Chapter Two is being done.

STEP TWO. *3–2–3*

I. Introductory Statement. The new melodic pattern is 3–2–3, as illustrated in the following quotation from the Overture to "The Magic Flute" by Mozart (Figure 13). You will realize that this pattern has already appeared as *third part* in the material of Step One of this chapter. This discovery should be verified through experimentation at the keyboard, which should also show you that 2 may be harmonized by V. All of the principles and practices of Chapter Two, Step One, apply in Step Two.

Overture, "Magic Flute" (last 5 measures). Mozart

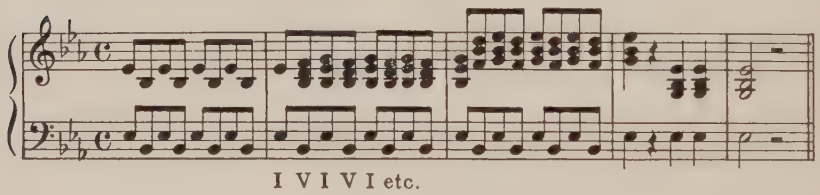



FIGURE 13

Another good illustration of the use of the melodic pattern, 3–2–3, will be found in the Soldiers' Chorus from "Faust," by Gounod (Figure 14), where the chord progressions of the accompaniment to the familiar melody are in exact accordance with the material of this step.

Soldiers' Chorus from "Faust." Gounod

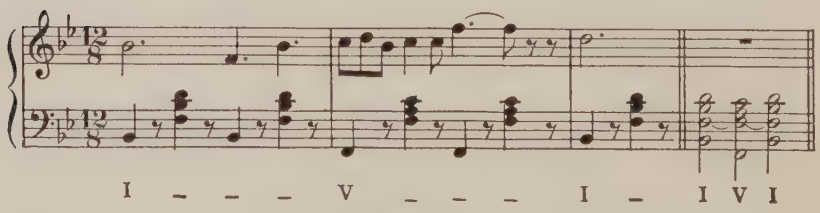


FIGURE 14

The new melodic figure may be used as a cadence or as a cadential progression. The effect as a cadence, however, is not as strong and final as was 8–7–8, although it is equally effective as a cadential progression, and may be used happily as the cadence of phrases other than the final one.

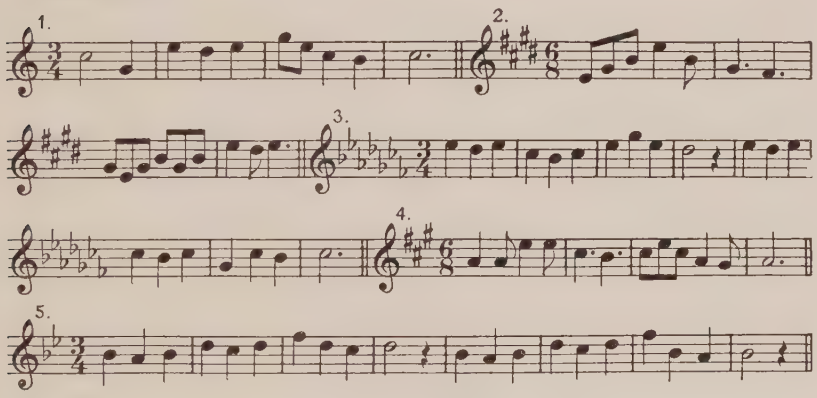
II. Chord Building. [2–*a*]

(1) **Writing Triads.** *Write the melodic pattern 3–2–3 in all major keys, harmonizing the progression with I–V–I in accordance with the procedure of Chapter Two, Step One, II.*

(2) **Playing Triads.** *These progressions should be used for keyboard experience in all major keys.*

III. Harmonizing Melodies. [2–*b*] *The melodies of Exercise 7 should be worked in accordance with previous procedure, both as written and keyboard work.*

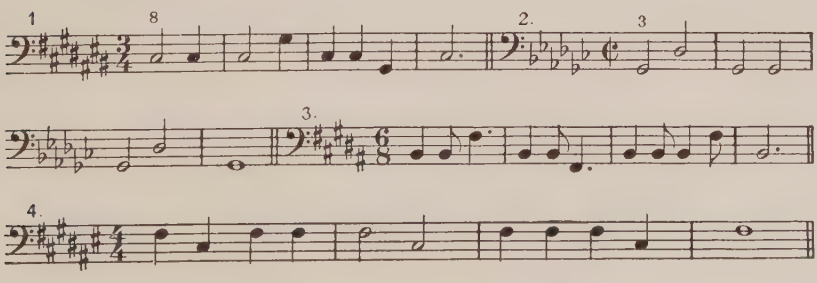
EXERCISE 7.



IV. Melodic Invention. [2–*c*] *Your melodies under this assignment should include the pattern 3–2–3.*

V. Harmonizing Basses. [2–*d*] *The basses of Exercise 8 are to be taken for both written and keyboard work. The harmonization should include the melodic pattern 3–2–3.*

EXERCISE 8.



VI. Keyboard Harmony. [2–*e*] *Play the material of this step as directed under Step One, VI.* (1) *Keyboard drill;* (2) *transposition.*

VII. Ear Training. [2–*f*] The material for this step should be used for written and keyboard dictation in accordance with the directions of Step One, VII, above.

(1) *Written Dictation, melodic and harmonic.*

(2) *Keyboard Dictation, melodic and harmonic.*

VIII. Harmonic Analysis. [2–*g*] *Continue as outlined under Step One, above.* You should not only look for examples of the dominant triad and mark them with V, but also try to discover examples of the melodic pattern in which the V is used. For instance, a splendid use of the melodic figure 3–2–3, harmonized by I–V–I, occurs after the opening chords of the Largo from Dvořák's New World Symphony. (See also Figure 8.)

STEP THREE. *5–5–5*

I. Introductory Statement. The new melodic pattern is 5–5–5, well illustrated by the quotation from Beethoven's Fifth Symphony, first movement (Figure 15). This pattern has already appeared as the second part in the material of Step One of this chapter, and as third part in the material of Step Two. While effective as a cadential progression, the pattern, 5–5–5, as a cadence is even weaker than 3–2–3. Experience demonstrates that 8–7–8 is the best final cadence of the three, and therefore it is called the *perfect form* of the *authentic cadence.* In the authentic cadence the dominant chord is found on the unaccented beat of the measure. When the dominant chord occurs on the accented beat, the cadence is said to have a *feminine* ending. When the phrase ends with the melodic pattern 3–2–3, or 5–5–5, it is said to close with an *imperfect cadence.*

Fifth Symphony, First Movement. Beethoven

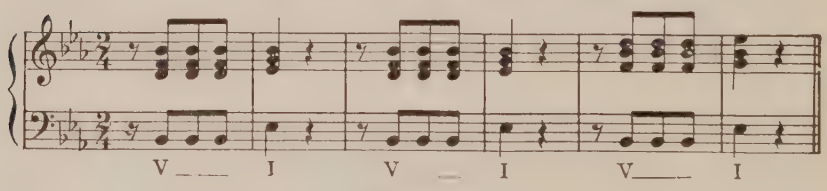



FIGURE 15

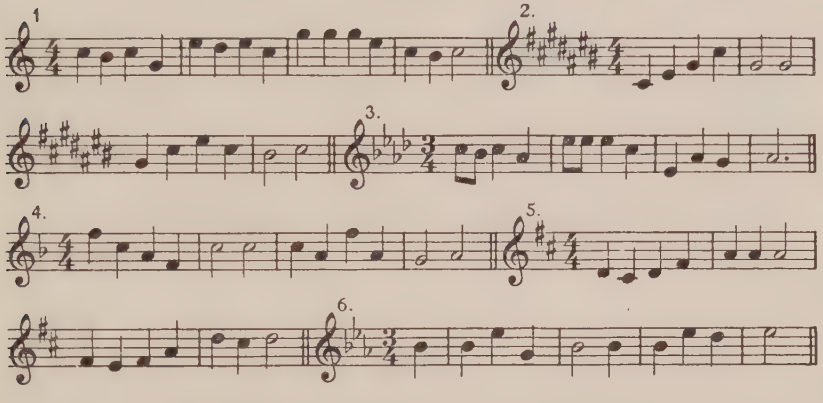
II. Chord Building. [3–*a*]

(1) **Writing Triads.** *Write the melodic pattern 5–5–5 in all major keys, harmonizing the progression with I–V–I in accordance with previous procedure.*

(2) **Playing Triads.** *These progressions should be used for keyboard experience in all major keys.*

III. Harmonizing Melodies. [3–*b*] *The melodies of Exercise 9 should be worked in accordance with previous procedure for both written and keyboard work.*

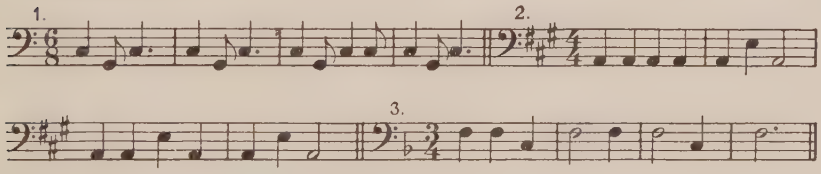
EXERCISE 9.



IV. Melodic Invention. [3–*c*] *Your melodies under this assignment should include the pattern 5–5–5. Observe what was said regarding length of melodies in Step One, IV.*

V. Harmonizing Basses. [3–*d*] *The basses of Exercise 10 are to be taken for both written and keyboard work. The harmonization should include the melodic pattern 5–5–5.*

EXERCISE 10.



VI. Keyboard Harmony. [3–*e*] *Play the material of this step as directed under Step One, VI.* (1) *Keyboard drill;* (2) *transposition.*

VII. Ear Training. [3–*f*] The material for this step should be used for dictation in accordance with previous directions.

(1) *Written Dictation, melodic and harmonic.*
(2) *Keyboard Dictation, melodic and harmonic.*

VIII. Harmonic Analysis. [3–*g*] *Continue according to previous directions.*

STEP FOUR. *Skips along the Dominant Triad*

I. Introductory Statement. The new melodic pattern includes skips from one tone of the dominant triad, V, to another tone of the same chord, as illustrated in the quotation from the Overture to "William Tell," Rossini (Figure 16).

Overture, "William Tell." Rossini

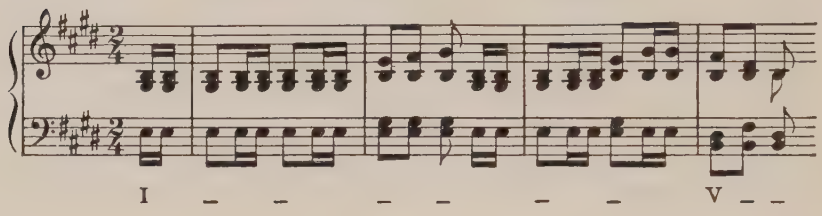


FIGURE 16

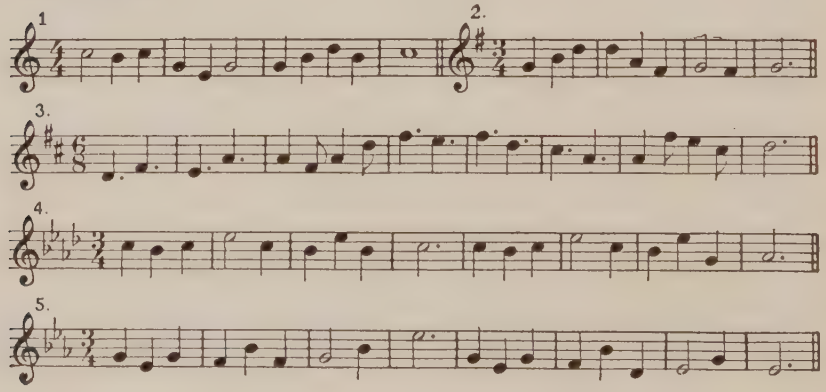
Two fundamental operations must be observed in this step: First, the first melody tone in the dominant harmony must be introduced in accordance with the progression from I to V as outlined in Chapter Two, Steps One, Two, and Three; *i.e.*, 8–7, 3–2, or 5–5. Second, the progression from the last V chord back to I must also follow the procedure outlined in Chapter Two, Steps One, Two, and Three; *i.e.*, 7–8, 2–3, or 5–5.

The melodic skips from one tone of the dominant triad to another are at the will of the composer, with no restrictions except those of good musical taste.

II. Chord Building. There is no new assignment for this procedure under Step Four.

III. Harmonizing Melodies. [4–*a*] *The melodies of Exercise 11 should be worked in accordance with previous procedure for both written and keyboard work.*

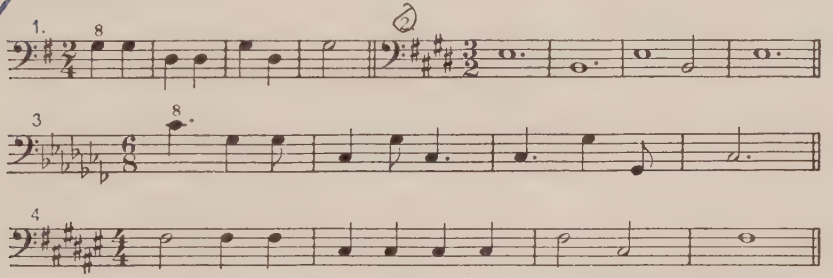
EXERCISE 11.



IV. Melodic Invention. [4–*b*] *The melodies should illustrate the topic, Skips along the Dominant Triad.* The idea of Question and Answer, or Antecedent and Consequent, as developed in Chapter One, pages 4–5, may now occasionally be expanded into two balancing phrases of four measures each. At present it is best to build both phrases upon the same melodic idea, closing the first phrase with a half cadence or an imperfect cadence and the second phrase with an authentic cadence. You must consider carefully the balance and proportion of your melodies in order that a tasteful effect may be secured rather than mere mechanical accuracy.

V. Harmonizing Basses. [4–*c*] *The basses of Exercise 12 are to be taken for both written and keyboard work.* The harmonization should include the melodic pattern of skips along the dominant triad.

EXERCISE 12.



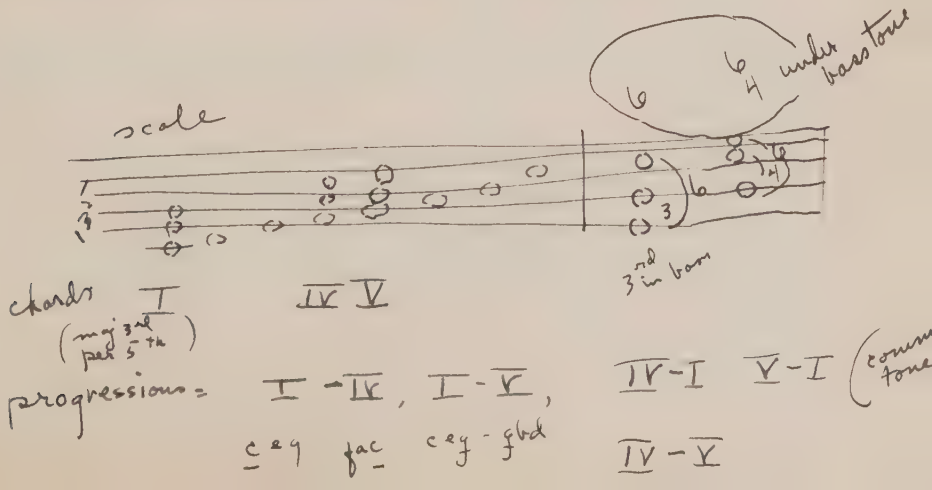
VI. Keyboard Harmony. [4–*d*] *Play the material of this step as directed under Step One, VI.* (1) *Keyboard drill;* (2) *transposition.*

VII. Ear Training. [4–*e*] The material of this step should be used for dictation in accordance with previous directions.

(1) *Written Dictation, melodic and harmonic.*

(2) *Keyboard Dictation, melodic and harmonic.*

VIII. Harmonic Analysis. [4–*f*] *Continue according to previous directions.* Among the examples of the pattern of this step, we suggest a study of those in Sullivan's hymn tune, "Onward, Christian Soldiers."



Hallelujah Chorus from "The Messiah." Handel

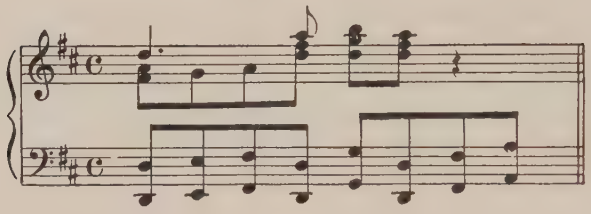


FIGURE 17

CHAPTER THREE

THE SUBDOMINANT TRIAD

STEP ONE. *5–6–5*

I. Introductory Statement. Your study of the subdominant triad should follow a similar procedure to that of the study of the dominant triad, by first playing thoughtfully the quotation at the head of this chapter (Figure 17), the introductory measures of the Hallelujah Chorus from Handel's "Messiah." The new chord will at once be discovered, and experimentation in harmonizing Exercise 13, No. 1, will lead to the following conclusions:

(1) The best chord with which to harmonize 6 of the scale is the triad built on 4, consisting of the scale tones 4, 6, 8.

(2) Since this triad has the subdominant, or 4 of the scale, as its root, it is called the subdominant triad, represented by the Roman numeral IV.

(3) In connecting the tonic and subdominant triads the root of each is played as the bass tone, the other tones progressing with as little motion as practicable. The melody is 5–6–5; the second part is 3–4–3; the third part is 1–1–1. Thus three melody patterns are combined in this chord progression, and you should always think of each part as progressing melodically.

(4) The tonic and subdominant triads have a tone in common, 1, which appears in both chords in the same (third) part.

(5) The subdominant triad is an active or tendency chord. The active quality of its tones, however, is less intense than in the dominant

triad, especially as it includes 1, the least active tone of the scale. The resolution, IV–I, at the close of a phrase, is called the *plagal cadence.*

II. Chord Building. [1–*a*] Playing and writing chords.

(1) **Spelling Triads.** *Spell the subdominant triad in all (15) major keys.*

(2) **Writing Triads.** *Write the melodic pattern, 5–6–5, in all (15) major keys.* Harmonize this pattern with the chords I–IV–I, indicated by these Roman numerals written below the bass staff. Next write the bass notes, *i.e.*, the roots of the chords, 1–4–1 of the scale. Then write the inner parts of the first chord. Next find the common tone, which in this progression is 1 of the scale, appearing in the third part. Write it for the subdominant triad, and connect it by a tie with the same tone in the preceding chord. Write the other tone of the subdominant triad, 4 of the scale, in the second part.

In order to give a sense of completeness to this progression, the chord, IV, should be followed by I. Therefore place and tie the common tone; then write the note for the remaining part.

Whenever the melodic pattern 5–6–5 appears as melody, it may be harmonized by I–IV–I according to the above procedure. (See Figure 18.)

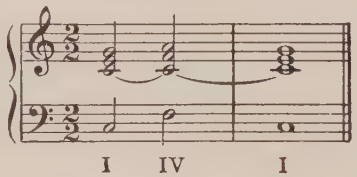


FIGURE 18

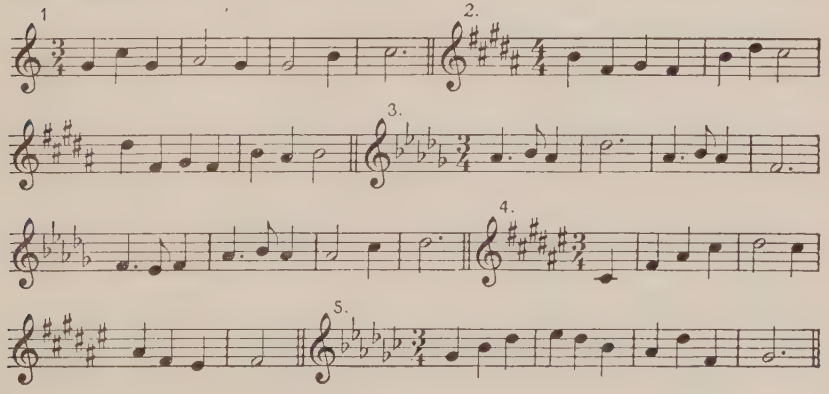
(3) **Playing Triads.** *Play the melodic pattern 5–6–5, harmonized by I–IV–I, in all (15) major keys.*

III. Harmonizing Melodies. [1–*b*] *Harmonize the melodies of Exercise 13 in close position.*

(1) **Written Work.** *Follow the directions in Chapters One and Two.* Always indicate the identity of all triads by means of the proper Roman numerals under the bass notes.

(2) **Keyboard Work.** *Play the material of this step as directed in Chapter One, page 4.*

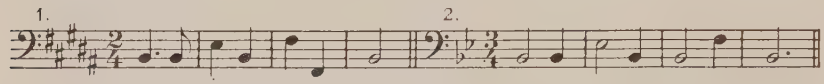
EXERCISE 13.



IV. Melodic Invention. [1–*c*] *Follow the directions in Chapter One, page 4.* Your melodies should include the melodic pattern 5–6–5, and may be of four or eight measures length.

V. Harmonizing Basses. [1–*d*] *The basses of Exercise 14 are for both written and keyboard work.* The harmonic progression I–IV–I at this point should introduce the melodic pattern 5–6–5, though the melodic patterns 3–4–3 and 1–1–1 may also be employed.

EXERCISE 14.



VI. Keyboard Harmony. [1–*e*] Follow the directions for this form of study given under II (3) in a preceding paragraph. Constant keyboard application should be made of every step. Frequently practice transpositions of all exercise material.

VII. Ear Training. [1–*f*] The material of this chapter should be used for written and keyboard dictation in accordance with the directions in Chapter One, and also as suggested in Chapter Two.

(1) *Written Dictation, melodic and harmonic.*

(2) *Keyboard Dictation, melodic and harmonic.*

VIII. Harmonic Analysis. [1–*g*] The discussion of the procedure of analysis, as given in Chapter One, page 9, and in Chapter Two, page 21, should be reviewed and applied to the new topic, the subdominant triad, IV. The same hymn tunes and piano compositions in which you discovered and marked the tonic and dominant triads may again be used to locate subdominant triads. They should be marked with an IV below the bass staff. Too much stress cannot be placed upon the importance of associating *hearing* with all analysis. The following compositions are suggested as illustrating the topic under consideration: "Nearer, my God, to Thee," Mason; "Work Song," Mason; "But the Lord is Mindful of His Own," from "St. Paul," Mendelssohn. (See also Figure 48.)

IX. Free Composition. [1–*h*] A third assignment in free composition should be undertaken while the work of Chapter Three is being done, following the directions for this work as given in Chapters One and Two.

STEP TWO. *3–4–3*

I. Introductory Statement. The new melodic pattern is 3–4–3, as illustrated in the following quotation from the hymn tune, "Gethsemane," by Richard Redhead (Figure 19). This pattern has already appeared as second part in the material of Step One of this chapter. All of the principles and practices of Step One of this chapter apply in Step Two.

Gethsemane. Richard Redhead

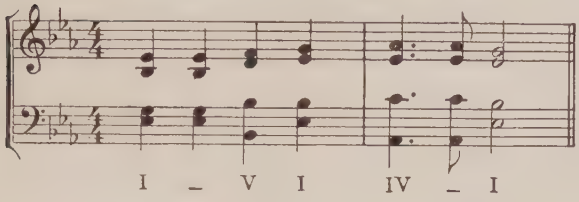



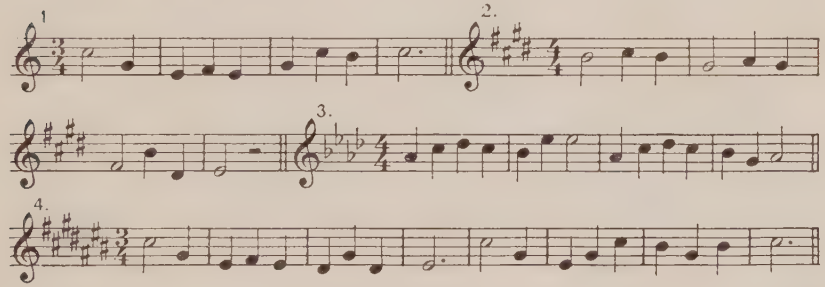
FIGURE 19

II. Chord Building. [2–*a*]

(1) **Writing Triads.** *Write the melodic pattern 3–4–3 in all (15) major keys, harmonizing the progression with I–IV–I in accordance with the procedure of Chapter Three, Step One.*

(2) **Playing Triads.** *These progressions should be used for keyboard experience in all major keys.*

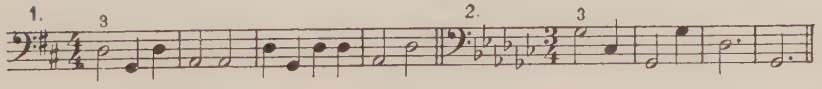
III. Harmonizing Melodies. [2–*b*] *Harmonize the melodies of Exercise 15 in accordance with previous procedure for both written and keyboard work.*

EXERCISE 15.

An additional assignment under the heading, " Harmonizing Melodies," is suggested through writing an accompaniment to the familiar melody, " Annie Laurie," using only the chord progressions of this and the preceding chapters. First write simple chords, observing the common tone principle, then arrange the notes for the right hand so that they will appear as broken chords.

IV. Melodic Invention. [2–*c*] *Your melodies under this assignment should include the pattern 3–4–3, and may be four or eight measures long.*

V. Harmonizing Basses. [2–*d*] *The basses of Exercise 16 are to be taken for both written and keyboard work.* The harmonization should include the melodic pattern 3–4–3.

EXERCISE 16.



VI. Keyboard Harmony. [2–*e*] *Play the material of this step as directed under Step One, VI.* (*1*) *Keyboard drill;* (*2*) *transposition.*

VII. Ear Training. [2 *f*] *The material of this step should be used in accordance with the directions of Step One, VII, page 24.*

(1) *Written Dictation, melodic and harmonic.*

(2) *Keyboard Dictation, melodic and harmonic.*

VIII. Harmonic Analysis. [2–*g*] *Continue as outlined under Step One, above.* Analyze Dvořák's Humoresque, and also the following measures from Chopin's Nocturne in G minor.

Nocturne in G minor. Chopin

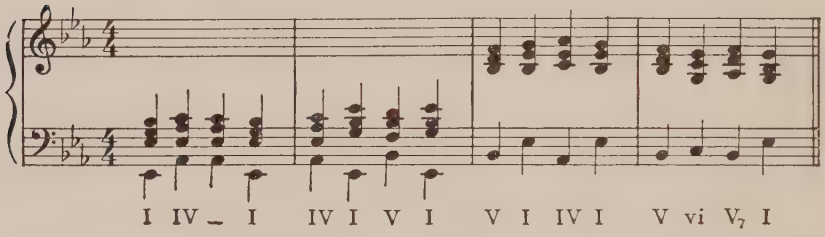



FIGURE 20

STEP THREE. *8–8–8 (or 1–1–1)*

I. Introductory Statement. The new melodic pattern is 8–8–8, or 1–1–1, and is found in the quotation from Beethoven's Appassionata Sonata, Second Movement (Figure 21). This pattern has already appeared in the third part of Step One of this chapter, and in the second part of Step Two.

Sonata, Op. 57, "Appassionata," second movement. Beethoven

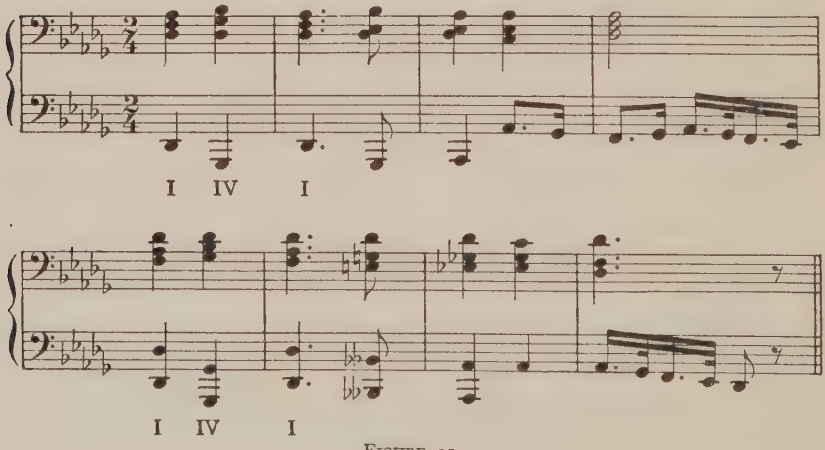


FIGURE 21

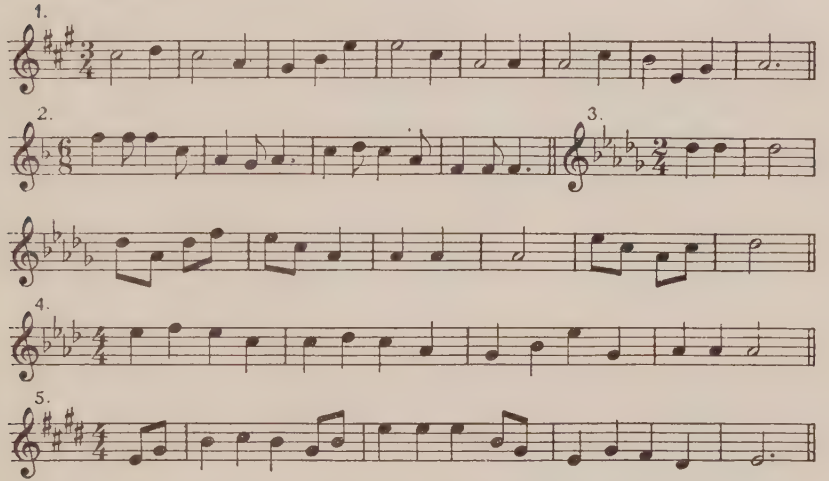
II. Chord Building. [3–*a*]

(1) **Writing Triads.** *Write the melodic pattern 8–8–8 in all (15) major keys, harmonizing the progression with I–IV–I in accordance with previous procedure.*

(2) **Playing Triads.** *These progressions should be used for keyboard experience in all major keys.*

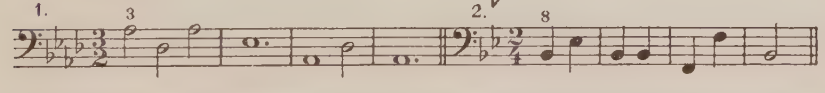
III. Harmonizing Melodies. [3–*b*] *The melodies of Exercise 17 should be worked in accordance with previous procedure for both written and keyboard work.*

EXERCISE 17.



IV. Melodic Invention. [3–*c*] *Your melodies under this assignment should include the pattern 8–8–8, and may be four or eight measures in length.*

V. Harmonizing Basses. [3–*d*] *The basses of Exercise 18 are to be used for both written and keyboard work. The harmonization should include the melodic pattern 8–8–8.*

EXERCISE 18.

VI. Keyboard Harmony. [3–*e*] *Play the material of this step as directed under Step One, VI.* (1) *Keyboard drill;* (2) *transposition.*

VII. Ear Training. [3–*f*] The material of this step should be used for dictation in accordance with previous directions.

(1) *Written Dictation, melodic and harmonic.*

(2) *Keyboard Dictation, melodic and harmonic.*

VIII. Harmonic Analysis. [3–*g*] *Continue according to previous directions.* A beautiful example of the progression of this step will be found in Schumann's "Träumerei." Another example occurs in the final cadence of the Andante Cantabile from Tschaikowsky's String Quartet, Opus 11, providing a most effective plagal cadence. (See also Figure 8.)

STEP FOUR. *Skips along the Subdominant Triad*

I. Introductory Statement. This new melodic pattern includes skips from one tone of the subdominant triad, IV, to another tone of the same chord, as illustrated in the quotation from the fifth and sixth measures of the beautiful horn quartet in Weber's Overture, "Der Freischütz." (See Figure 22.)

Overture, "Der Freischütz." Weber

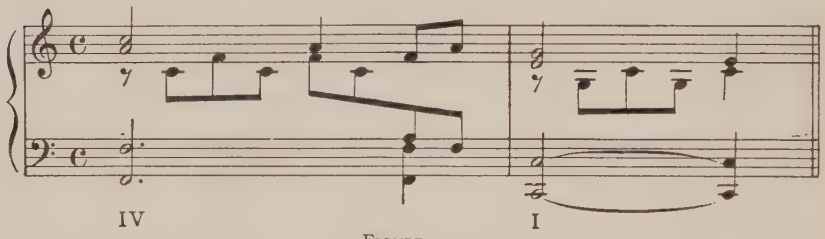
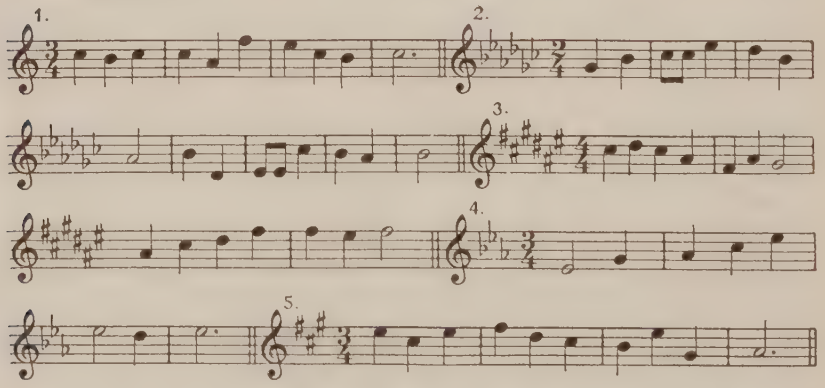


FIGURE 22

II. Chord Building. There is no new assignment for this procedure under Step Four.

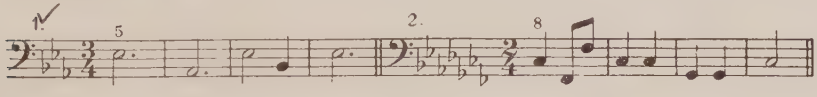
III. Harmonizing Melodies. [4–*a*] *The melodies of Exercise 19 should be worked in accordance with previous procedure, both for written and keyboard work.*

EXERCISE 19.

IV. Melodic Invention. [4–*b*] *The melodies should illustrate the topic, Skips along the Subdominant Triad.* At this point it may be well to call

your attention to the general principle of art that good musical proportion usually requires repetition to be balanced by variety. When the same chord is repeated several times in succession, the melody usually skips from one tone of the chord to another. When the melody repeats the same tone several times in succession, the harmonies usually will be varied. A beautiful example of this latter effect is found in the early measures of Liszt's Liebestraum.

V. Harmonizing Basses. [4 *c*] *The basses of Exercise 20 are to be used for both written and keyboard work.* The harmonization should include the melodic pattern of skips along the subdominant triad.

EXERCISE 20.



VI. Keyboard Harmony. [4–*d*] *Play the material of this step as directed under Step One, VI. (1) Keyboard drill; (2) transposition.*

VII. Ear Training. [4–*e*] The material of this step should be used for dictation in accordance with previous directions.

(1) *Written Dictation, melodic and harmonic.*
(2) *Keyboard Dictation, melodic and harmonic.*

VIII. Harmonic Analysis. [4–*f*] *Continue according to previous directions.* Examples of the pattern of this step will be found in the familiar college song, " There's Music in the Air " ; the folk song, " Flow Gently, Sweet Afton " by Spilman ; and Foster's " My Old Kentucky Home."

Vive l'Amour, Student Song

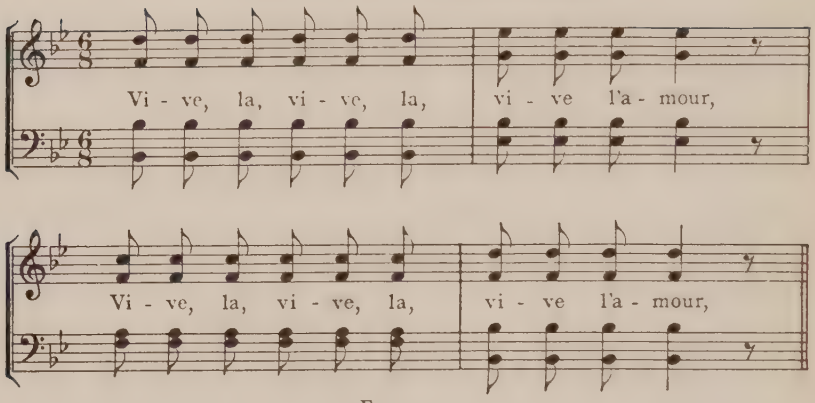



FIGURE 23

CHAPTER FOUR

THE PROGRESSION IV–V

THE THREE-CHORD CADENCE

THE CONTRARY MOTION PRINCIPLE

STEP ONE. *8–8–7–8*

I. Introductory Statement. The subject of this chapter offers a curious anomaly in that, while the harmonic progression, I–IV–V–I, is fundamentally important in theory and must be mastered as one of the basic principles of harmony, it occurs very rarely in music. It is too rugged and severe to be inviting to composers, who prefer to substitute other serviceable chords for these simple harmonies. Nevertheless it must be clearly understood that, while this progression in its simplest form rarely appears, I–IV–V–I is the background for many cadences which achieve more musical characteristics through chord substitutions which we shall study later (Chapters Sixteen and Nineteen). It is necessary that you master this progression thoroughly in order to understand and use the more interesting substitutions of our more advanced studies.

By referring to Exercise 21, No. 1, you will observe that the final four tones are 8–8–7–8. Because we have learned that wherever practicable repeated melody tones should be harmonized by different chords, we shall harmonize the melodic pattern 8–8–7–8 by the chords I–IV V I. This procedure results in a three-chord cadence (or cadential progression) IV–V–I; that is, a cadence in which two active chords follow each other progressing to a passive chord. The activity of successive active chords should be cumulative, and as the dominant triad is more active than the subdominant triad, the progression V–IV will seldom be effective.

You will observe at the keyboard and in written music that there is no tone common to the two triads IV and V whose roots occupy adjacent degrees of the scale. In the progression IV–V you will discover that the bass part moves upward while the three other parts progress downward. (See Figure 23.) The progression of parts in opposite directions is called *contrary motion*. (Parts progressing in the same direction are in *parallel motion*. *Oblique motion* occurs when one part moves upward while the other part repeats the same tone or remains stationary.) Further experimentation will demonstrate the better musical effect of proceeding according to the following rule: In progressions where no common tone occurs, the upper parts should be led to the nearest tone of the new chord in *contrary motion to the bass part.*

Thus far two rules for chord connections have been stated: first, in chord progression where there is a common tone, that tone should be kept in the same part; and second, where there is no common tone, the upper parts should progress in contrary motion to the bass. If you consistently observe these two principles, the *common tone principle* and the *contrary motion principle*, you will find little difficulty in writing correct chord progressions in the exercises of this course.

For the Teacher: Discussion of consecutive parallel fifths and octaves is unnecessary at this time because the material of the course, if followed according to directions, offers no occasion for incorrect part writing.

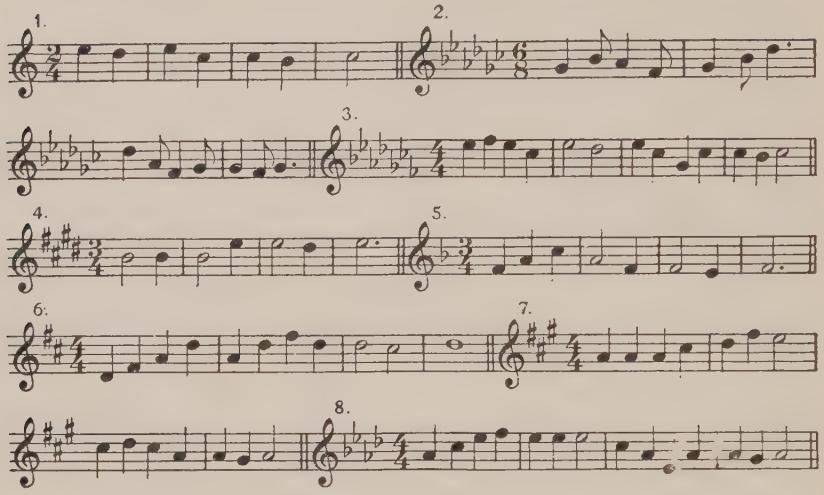
II. Chord Building. [1–*a*]

(1) **Writing Triads.** *Write the melodic pattern 8–8–7–8 in all (15) major keys, harmonizing the progression with I–IV–V–I in accordance with previous procedure and with observance of the contrary motion principle as discussed in the Introductory Statement above.*

(2) **Playing Triads.** *These progressions should be used for keyboard experience in all major keys.*

III. Harmonizing Melodies. [1–*b*] *The melodies of Exercise 21 should be harmonized in accordance with the procedure of previous chapters and the directions in the Introductory Statement of this chapter, for both written and keyboard work.*

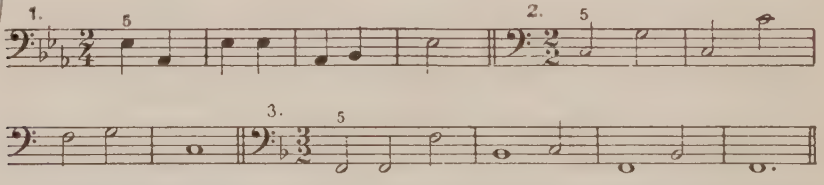
EXERCISE 21.



IV. Melodic Invention. [1–*c*] *According to previous directions, invent melodies of four or eight measures which shall include the melodic pattern 8-8–7-8.* At first it will be best to confine this pattern to the closing cadence, although it may be used later as a cadential progression. The progression I–IV–V may be used effectively as the close of the first phrase, the second beginning with I.

V. Harmonizing Basses. [1–*d*] *The basses of Exercise 22 are to be used for both written and keyboard work.* The harmonization should include the melodic pattern 8–8–7–8.

EXERCISE 22.



VI. Keyboard Harmony. [1–*c*] *The material of this step is studied according to previous directions;* (1) *keyboard drill;* (2) *transposition.*

VII. Ear Training. [1 *f*] The material of this step should be used for written and keyboard dictation in accordance with previous directions.

(1) *Written Dictation, melodic and harmonic.*

(2) *Keyboard Dictation, melodic and harmonic.*

VIII. Harmonic Analysis. [1–*g*] *Continue according to previous directions.* Although, as discussed in the Introductory Statement of this step,

you will find few instances of the simple form of I–IV–V–I, your search will reveal many examples of the progression IV–V and other instances of the employment of contrary motion. You will also be able to discover the many ingenious and charming ways in which composers have employed simple substitutions of other chords and avoided the severity of the plain I–IV V I progression. Your experience will enrich your own harmonic feeling and help you to make your own attempts at composition more ingenious and interesting.

IX. Free Composition. [1 *h*] A fourth assignment in free composition should be undertaken while the work of Chapter Four is being done, following the directions given in the earlier chapters.

STEP TWO. *5–6–5–5*

I. Introductory Statement. The new melodic pattern is 5–6–5–5 as found in the melodies of Exercise 23. This pattern has already appeared as second part in the material of Step One of this chapter. All the principles and practices of Step One of this chapter apply in Step Two.

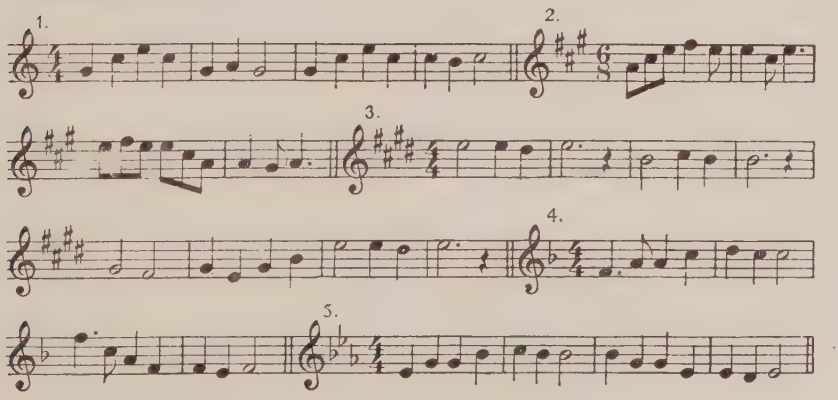
II. Chord Building. [2–*a*]

(1) **Writing Triads.** *Write the melodic pattern 5–6–5–5 in all (15) major keys, harmonizing the progression with I–IV–V–I in accordance with the procedure of Step One of this chapter.*

(2) **Playing Triads.** *These progressions should be used for keyboard experience in all major keys.*

III. Harmonizing Melodies. [2 *b*] *The melodies of Exercise 23 should be harmonized in accordance with previous procedure for both written and keyboard work.*

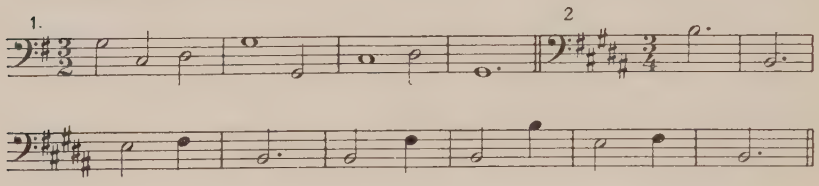
EXERCISE 23.



IV. Melodic Invention. [2–c] *Your melodies under this assignment should include the pattern 5–6–5–5, and may be four or eight measures long.*

V. Harmonizing Basses. [2–d] *The basses of Exercise 24 are to be used for both written and keyboard work. The harmonization should include the melodic pattern 5–6–5–5.*

EXERCISE 24.



VI. Keyboard Harmony. [2–e] *Play the material of this step as directed under Step One, VI, for keyboard drill and transposition.*

VII. Ear Training. [2–f] The material for this step should be used in accordance with the directions of Step One, VII, above.

(1) *Written Dictation, melodic and harmonic.*
(2) *Keyboard Dictation, melodic and harmonic.*

VIII. Harmonic Analysis. [2–g] *Continue as outlined under Step One, above.*

STEP THREE. *3–4–2–3*

I. Introductory Statement. The new melodic pattern is 3–4–2–3, and will be found in the quotation from the well-known college song, "Vive l'Amour" (Figure 23) given at the head of this chapter. The pattern has appeared as the third part in the material of Step One, and the second part in the material of Step Two of this chapter. All the principles and practices of Steps One and Two of this chapter apply in Step Three.

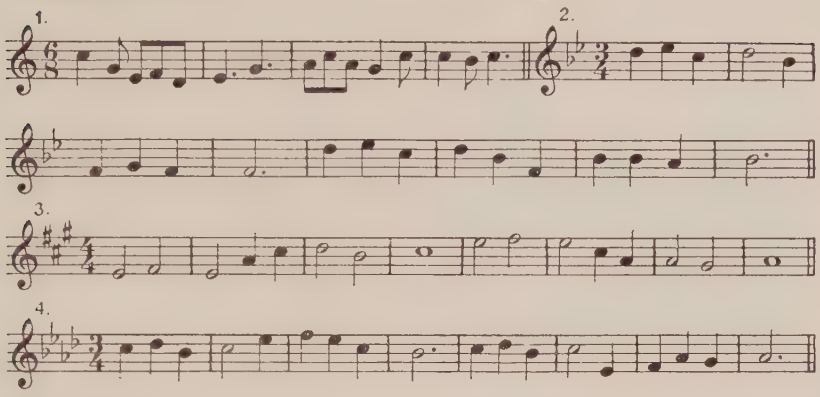
II. Chord Building. [3–a]

(1) **Writing Triads.** *Write the melodic pattern 3–4–2–3 in all major keys, harmonizing the progression with I–IV–V–I in accordance with the procedure of this chapter.*

(2) **Playing Triads.** *These progressions should be used for keyboard experience in all major keys.*

III. Harmonizing Melodies. [3–b] *The melodies of Exercise 25 should be worked in accordance with previous procedure for both written and keyboard work.*

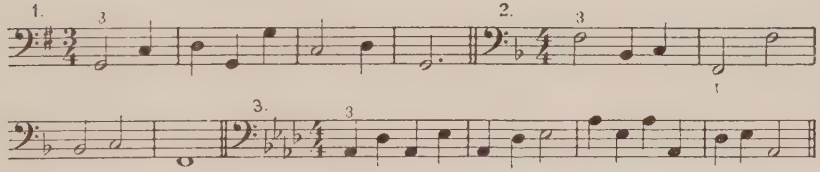
EXERCISE 25.



IV. Melodic Invention. [3 *c*] *Your melodies under this assignment should include the pattern 3–4–2–3, and may be four or eight measures long.*

V. Harmonizing Basses. [3–*d*] *The basses of Exercise 26 are to be taken for both written and keyboard work. The harmonization should include the melodic pattern 3–4–2–3.*

EXERCISE 26.



VI. Keyboard Harmony. [3–*e*] *Play the material of this step as directed under Step One, VI, for keyboard drill and transposition.*

VII. Ear Training. [3–*f*] The material for this step should be used in accordance with the directions of Step One, VII, page 32.

(1) *Written Dictation, melodic and harmonic.*
(2) *Keyboard Dictation, melodic and harmonic.*

VIII. Harmonic Analysis. [3–*g*] *Continue as outlined under Step One, page 32.*

Sonata, Op. 27, No. 2 ("Moonlight"), Third movement. Beethoven

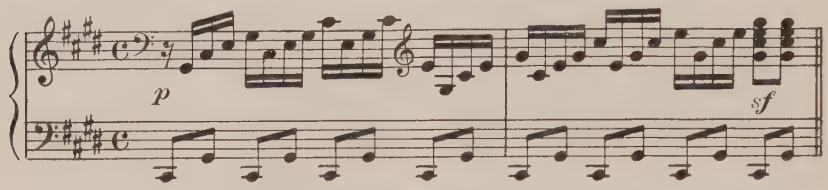


FIGURE 24

CHAPTER FIVE

THE MINOR MODE

STEP ONE. *The Tonic Minor*

Triad derived through an Altered Third

I. Introductory Statement. Of all the old modes, or scale patterns, current during the Middle Ages and previously related to the music of ancient Greece, from which modes our modern scales have descended, only two have survived for general use in modern music, the Major Mode and the Minor Mode. The Major is descended from the old Lydian Mode, with its half-steps between 3–4 and 7–8. The exercises in scale building outlined in the Introduction are developed according to this half-step formula. The Minor Mode is the survival of the Æolian Mode, and has its half steps between 2–3 and 5–6. We now call this scale the Natural Minor Scale, sometimes the Primitive Minor Scale. You will be called upon presently to build scales according to this formula, but we shall first have practical experience in the Minor Mode.

The difference between a major triad and a minor triad is found in the third of the triad; the third of the minor triad being one half-step lower than the third in the corresponding major triad. The distance from the root to the third of a major triad is called a *major third*, and includes four half-steps between its tones. The distance from the root to the third of a minor triad is called a *minor third*, and includes three half-steps; that is, one half-step less than the major third. By altering the third of the major tonic triad so that it sounds one half-step lower while retaining its original staff degree, we produce the minor tonic triad. This procedure is a common

one with composers, and is shown in Figure 25. The minor tonic triad is indicated by a small Roman numeral, i.

Il Trovatore, Finale Act IV. Verdi

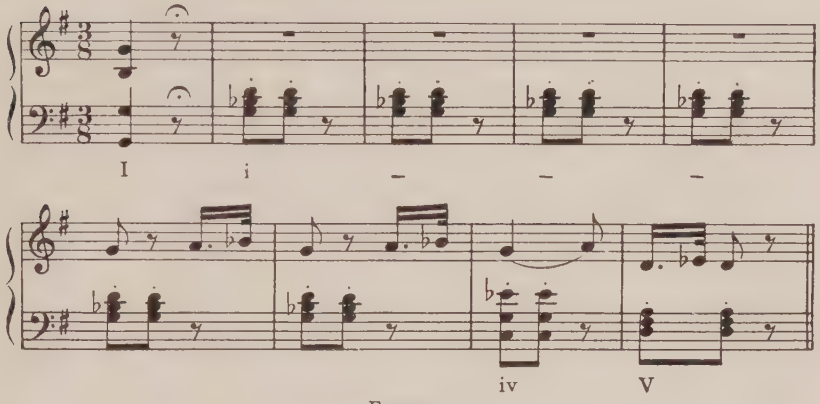


FIGURE 25

II. Chord Building. [1–*a*]

(1) **Writing Triads.** *Write the tonic triad in all (15) major keys, then by means of a chromatic sign alter the third of the triad so that it becomes one half-step lower.*

(2) **Playing Triads.** *Play the tonic triad in all (15) major keys, then play the third one half-step lower, thus producing the minor tonic triad. Allow each tone of the triad to serve in turn as the upper part.*

III. Harmonizing Melodies. [1–*b*] *The melodies of Exercise 1, altered so as to be in the tonic minor, are to be harmonized in accordance with procedure of previous chapters for both written and keyboard work.*

IV. Melodic Invention. [1–*c*] *Invent four measure melodies which shall involve tones of the minor tonic triad only.*

V. Harmonizing Basses. [1–*d*] *The basses of Exercise 4 are to be harmonized in the tonic minor for both written and keyboard work.*

VI. Keyboard Harmony. The keyboard work of this step has been assigned under Chord Building, Harmonizing Melodies, and Harmonizing Basses, above.

VII. Ear Training. [1–*e*] *The material of Exercise 1, altered so as to be in the tonic minor, is to be used for ear training according to previous procedure.*

(1) *Written Dictation, melodic and harmonic.*

(2) *Keyboard Dictation, melodic and harmonic.*

VIII. Harmonic Analysis. [1–*f*] In the following compositions find instances of the alteration of the tonic triad so as to produce the tonic minor:

1. Overture, "Martha," Flotow; 2. Sonata, Op. 27, No. 2, "Moonlight," Beethoven; 3. "Marche Militaire," Schubert; 4. "Celeste Aïda," from "Aïda," Verdi; 5. Overture, "Semiramide," Rossini; 6. Overture, "Merry Wives of Windsor," Nicolai; 7. Hungarian Rhapsody, No. 2, Liszt. This assignment may not only be accomplished with the notes before you, but may also be undertaken by listening to phonograph records, or reproducing piano rolls. As suggested in an earlier chapter, all analysis should be accompanied by the hearing of the selection, since a combination of note and ear analysis will be the most effective way of training your ear to appreciate the harmonic effects of the music which you hear performed.

Instances where the composer has altered his minor tonic triad so as to produce the tonic major may also be discovered. Study "Anitra's Dance," in Grieg's "Peer Gynt Suite," and Schubert's "Serenade."

Remember that major tonic triads are indicated by a capital Roman numeral, I, and minor tonic triads by a small numeral, i.

IX. Free Composition. [1–g] *An assignment in free composition should be undertaken while the work of Chapter Five is being done. Follow the directions of previous chapters.* While not required, you might find interest in attempting a composition in a minor key, or at least a passage in the tonic minor.

STEP TWO. *Melodic and Harmonic Content of Keys*

The Natural Minor Scale and the Minor Key Signature

I. Introductory Statement. The *melodic content* of a key is found in its scale. Scale building through the proper arrangement of the tones in steps and half-steps was studied in the Introduction. The scales of fifteen major keys were built and their key signatures organized.

The fundamental *harmonic content* of a key is found in its three primary triads: The tonic, I, the dominant, V, and the subdominant, IV. The primary triads in major keys have been the topics studied thus far.

In the study of minor keys we shall proceed first by altering the three primary triads of the key from major to minor, as was done with the tonic triad in Step One above, then deriving the minor scale and key signature. Since this process reverses the procedure employed in studying the major keys, we shall briefly review it in order that you may have the proper sequence in mind. From the major scales the three primary triads in major were built according to directions given in the Introduction and in Chapters One, Two, and Three. In the minor keys, however, we first form the three primary triads in minor by altering the third of each of the triads of the parallel major key. From the three primary minor triads so constructed we derive the natural minor scale and key signature.

II. Primary Triad Formula in Major Keys. The relationship of the tonic, dominant, and subdominant triads in major keys is shown in Figure

26. In this formula the primary triads of the major key are arranged so that the tonic triad appears as center, the dominant triad being written above, with the fifth of the tonic triad and the root of the dominant triad appearing as common tones. The subdominant triad is written below the tonic triad with the root of the tonic and the fifth of the subdominant triads appearing as common tones. The importance of the tonic and dominant tones of the scale is emphasized through their appearance twice in the primary triad formula.

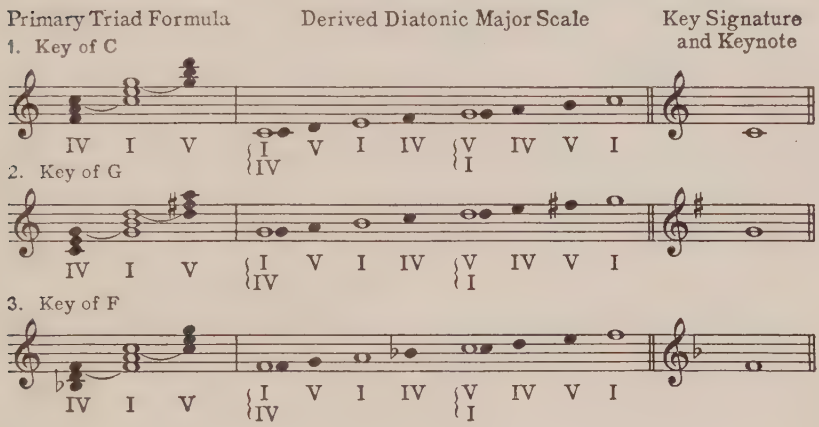
Harmonic and Melodic Content in Major

Primary Triad Formula
Derived Diatonic Major Scale
Key Signature and Keynote
1. Key of C
IV I V
I V I IV V IV V I
IV I
2. Key of G
IV I V
I V I IV V IV V I
IV I
3. Key of F
IV I V
I V I IV V IV V I
IV I

FIGURE 26

Following the primary triad formula in Figure 26 you will find the tones involved assembled in the form of a scale. The tones of the tonic triad appear as whole notes and those of the dominant and subdominant triads as black note-heads. Below each note is a Roman numeral, showing the primary triad or triads which include the scale tones. You will observe that the three principal triads of a key include all the tones of the scale.

The primary triad formula and the derived scale are shown without signatures, the sharps and flats necessary to effect the scale building formula of whole and half-steps appearing as accidentals before the notes. Following them are shown the key signature and keynote.

You will discover that the three primary triads in major keys have one feature in common — they are all major triads. In all major triads the third is a wide, or *major third*, including two whole-steps or four half-steps between its tones.

[2–*a*] *Continue the formulas of Figure 26 through all* (*15*) *the major keys.* It would be well to use only one half of each page, the other half being reserved for the exercise which follows. (See Figure 27.)

III. Primary Triad Formula in Minor Keys, Natural Form. The natural (primitive) content of a minor key, its natural scale and its key signature may be found by building a primary triad formula consisting of three minor triads; *i.e.*, a minor triad on each of the following tones of the key, the tonic, the dominant, and the subdominant, as is shown in Figure 27. You have already learned that the minor triad differs from the major triad in that the third of the minor triad is one half-step lower than the third of the major triad.

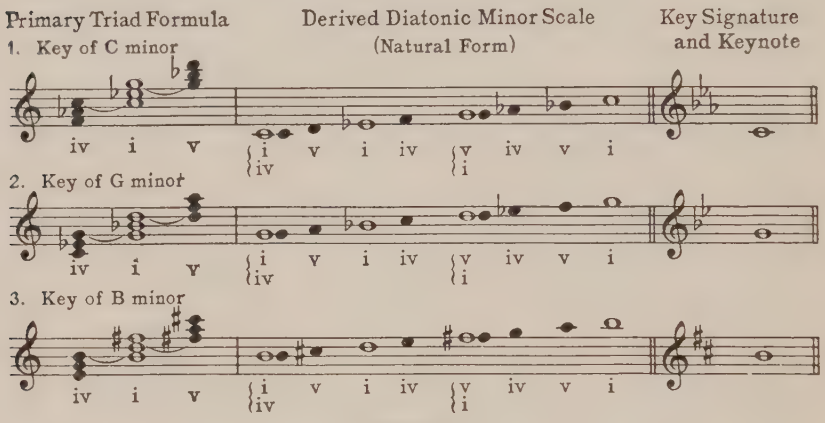
Harmonic and Melodic Content in Natural Minor

Primary Triad Formula
Derived Diatonic Minor Scale
(Natural Form)
Key Signature
and Keynote
1. Key of C minor
iv i v
i iv v i iv v iv v i
2. Key of G minor
iv i v
i iv v i iv v iv v i
3. Key of B minor
iv i v
i iv v i iv v iv v i

FIGURE 27

[2–*b*] *With the information given in this and the preceding lessons, and with the examples shown in Figure 27, continue the minor primary triad formula (natural form), the derived natural minor scale, and the minor key signature in the following keys: (1) A minor; (2) E minor; (3) B minor; (4) F-sharp minor; (5) C-sharp minor; (6) A-flat minor; (7) E-flat minor; (8) B-flat minor; (9) F minor; (10) C minor; (11) G minor; (12) D minor.* It will be observed that this assignment follows the circle of keys, but that the keys of seven sharps and seven flats are omitted, as they seldom appear in minor musical compositions.

IV. The Circle of Keys, Showing Tonic Minor. [2–*c*] *Construct the circle of major keys. Within this circle draw another, placing upon the inner circle, opposite the name of each major key, the minor key having the same keynote, or tonic.* The diagram will show the relationship called *tonic*, or *parallel*, major and minor.

STEP THREE. *The Tonic Triad in Minor Keys*

I. Introductory Statement. The music quotation at the head of this chapter (Figure 24) gives a splendid illustration of the tonic triad in minor,

as does the quotation from Chopin's "Prelude" (Figure 28). The material of this step is essentially similar to that of Step One of this chapter, the difference consisting in the employment here of the minor key signatures instead of the individual alteration of each chord into the minor form.

Prélude, Op. 28, No. 6. Chopin

FIGURE 28

II. Chord Building. [3-*a*]

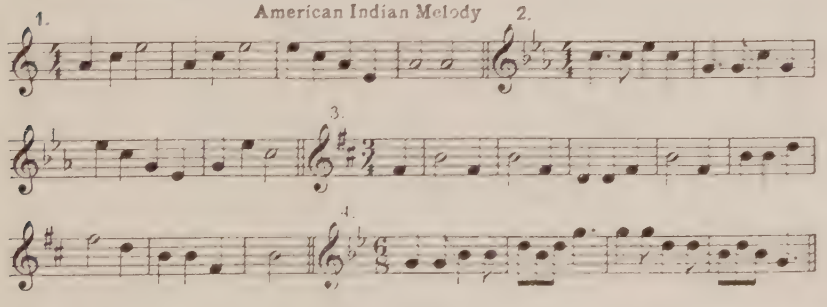
(1) **Spelling Triads.** *Spell the tonic triad in thirteen minor keys.*

(2) **Writing Triads.** *Write the tonic triad in thirteen minor keys, using the root, third, and fifth as melody tone in every key. Place the root always in the bass part.*

(3) **Playing Triads.** *Play the tonic triad in thirteen minor keys with the root, third, and fifth in the melody in turn, and the root always as the bass.*

III. Harmonizing Melodies. [3 *b*] *Harmonize the melodies of Exercise 27 in the same manner as the melodies of previous chapters have been harmonized. This assignment should be done for both written and keyboard work.*

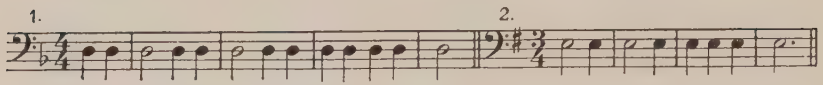
EXERCISE 27.



IV. Melodic Invention. [3 *c*] *Invent four measure melodies which shall involve only the tones of the tonic triad in minor. These should be written in the minor key, with the correct minor key signature.*

V. Harmonizing Basses. [3-*d*] *The basses of Exercise 28 are to be harmonized for both written and keyboard work.*

EXERCISE 28.



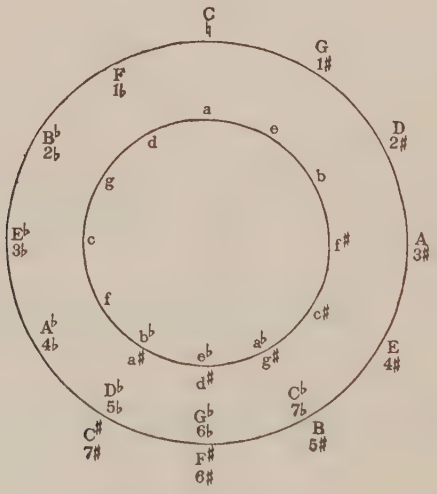
VI. Keyboard Harmony. The keyboard work of this step has been assigned under Chord Building, Harmonizing Melodies, and Harmonizing Basses, above.

VII. Ear Training. [3–*e*] The material of Exercise 27, and similar melodies selected from those which you have brought to class are to be used for ear training according to previous procedure. (The teacher or pupil giving the dictation should require the student to place the proper minor key signatures.)

(1) *Written Dictation, melodic and harmonic.*
(2) *Keyboard Dictation, melodic and harmonic.*

VIII. Harmonic Analysis. [3–*f*] *Hymns and piano compositions in minor keys should be analyzed, the tonic triads being discovered and indicated by a small "i" below the chord.*

The circle of keys (see p. xii) given below shows the relationship between the relative major and minor keys; *i.e.*, those which have the same key signatures.



Fifth Symphony, First Movement. Beethoven

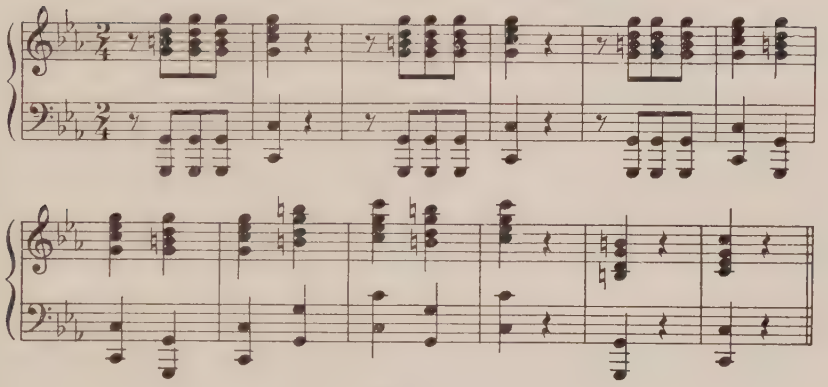



FIGURE 29

CHAPTER SIX

THE MINOR MODE (*Continued*)

THE HARMONIC MINOR

STEP ONE. *The Harmonic Minor Triad Formula and Derived Scale*

I. Introductory Statement. In order to intensify the active feeling of the dominant triad in minor keys and thereby produce a more satisfying cadence, it is customary to alter the third of the dominant triad (7 of the minor scale) to a pitch one half-step higher than it appears in the natural minor scale, so that it will be only one half-step below the keynote (8 of the minor scale). By this change, 7 of the scale in minor keys becomes a leading tone, or sensitive tone, as is the case with 7 in major keys, and the dominant triad in minor keys becomes a major triad, as in the major mode. The change is effected by an accidental which is written whenever 7 of the scale occurs in the harmonic content of a minor key. (See Figure 29, which should be carefully analyzed at the keyboard.)

II. Primary Triad Formula and Derived Scale, Harmonic Minor. The harmonic minor triad formula and the derived harmonic minor scale (constructed on the plan explained in Chapter Five) give the fundamental harmonic content of a minor key. They are shown in Figure 30. You will observe that the key signature is still written according to the natural

content of the minor key, and takes no account of the accidental by means of which the dominant triad becomes a major chord. This accidental must appear in each measure where the leading tone is required.

Derived Harmonic Minor Scale

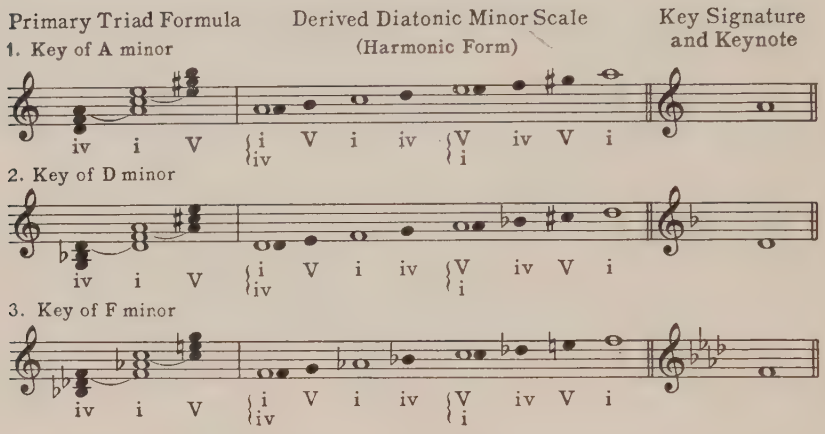

Primary Triad Formula
Derived Diatonic Minor Scale
(Harmonic Form)
Key Signature
and Keynote
1. Key of A minor
iv i V
{i iv V i iv {V i iv V i
2. Key of D minor
iv i V
{i iv V i iv {V i iv V i
3. Key of F minor
iv i V
{i iv V i iv {V i iv V i

FIGURE 30

[1–*a*] *Work out the primary triad formula (harmonic form) and the derived minor scale (harmonic form) in two or three additional minor keys, until the plan is clearly in mind.* The correct signatures for the minor keys should be placed as they appear in Figure 30. The difference between major and minor triads is indicated by the size of the Roman numeral, a large numeral for major triads and a small numeral for minor triads.

Study carefully the sequence of steps and half-steps in the harmonic minor scale. You will discover that between 6 and 7 of the scale there occurs an interval consisting of a step-and-a-half, or three half-steps.

[1–*b*] *Construct harmonic minor scales upon f♯, b, g, and c, availing yourself of both the triad formula and the interval relationship.*

STEP TWO. *The Dominant Triad in Minor*

I. Introductory Statement. The use of the dominant triad in minor keys involves no new rules or directions different from those given for the major keys. Indeed, in exercises involving the tonic and dominant triads only, as in the present step, the procedure is extremely simple, since the only difference between the familiar material of the major keys and the new minor material is found in the third of the tonic triad, which is provided for automatically by the correct minor key signature. A chromatic sign indicates the major third of the major triad on the dominant, V. Observe how Beethoven has employed the dominant triad in minor in "Für Elise," Figure 31.

"Für Elise." Beethoven

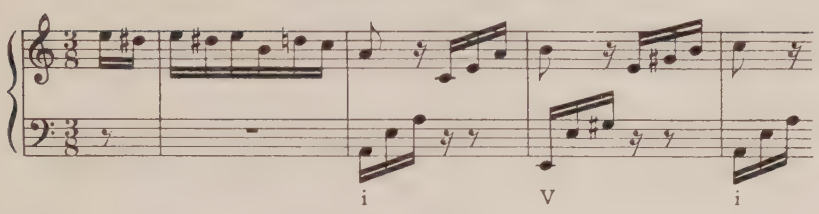



FIGURE 31

II. Melodic Patterns. The melodic patterns will be the same as in major, *i.e.*, (*a*) 8–7–8; (*b*) 3–2–3; (*c*) 5–5–5; and (*d*) skips along the dominant triad. The material of Chapter Two may become an assignment in minor merely by changing the key signature to the minor key of the same letter name, *i.e.*, the parallel, or tonic, minor key, and by providing for the accidental on the seventh step of the scale wherever it appears. In bass exercises such chromatic alterations of chords are indicated by placing the chromatic sign above (or below) the bass note. This accidental, when used alone, refers to the alteration of the tone a third above the bass, or lowest, note, in whatever part it may appear. (See Exercise 30.) In minor keys with more than two flats in the signature the alteration is indicated by a natural.

III. Chord Building. [2–*a*] Playing and writing chords.

(1) **Spelling Triads.** *Spell the dominant triad in thirteen minor keys.*

(2) **Writing Triads.** *Write the melodic patterns 8–7–8, 3–2–3, 5–5–5, in the following keys, F-sharp minor, C-sharp minor, F-minor, and B-flat minor. Harmonize the patterns as illustrated in Figure 32.*

(3) **Playing Triads.** *Play the progression, i–V–i, in twelve minor keys, employing the three melodic patterns, 8–7–8, 3–2–3, and 5–5–5.* (See Figure 32.)

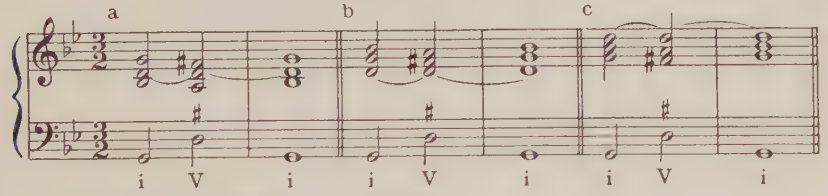
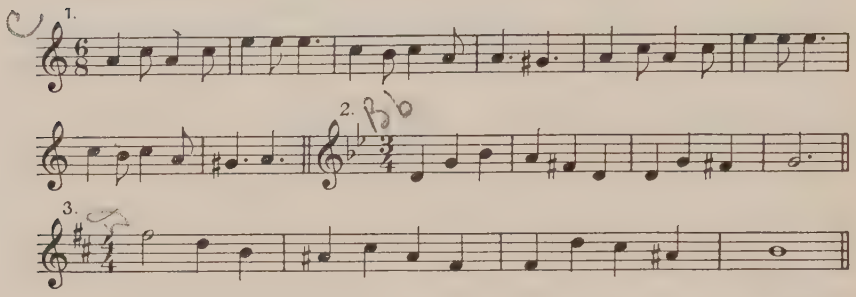


FIGURE 32

IV. Harmonizing Melodies. [2–*b*] The material for this assignment is twofold; first, the exercises for harmonizing melodies in Chapter Two already mentioned under II of this step; second, the melodies of Exercise 29. Exercises 5, 7, 9, and 11 are to be changed to the parallel minor key by altering the key signature. It would be well to avoid minor key signatures involving more than six sharps or flats. This can readily be done by trans-

posing the exercise to another more convenient key. The procedure and directions given in Chapter Two should be followed here, with the observance also of the directions regarding the minor mode.

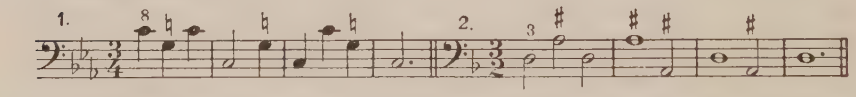
EXERCISE 29.



V. Melodic Invention. [2–*c*] *Invent four- or eight-measure melodies in minor keys, which shall include the harmonic progression i–V–i with one or more of the following melodic patterns; 8–7–8, 3–2–3, 5–5–5, and skips along the dominant triad.*

VI. Harmonizing Basses. [2–*d*] *For this assignment use the basses in Chapter Two, as given in Exercises 6, 8, 10, and 12.* By a change of the key signatures, these exercises are to be put into the parallel minor key. *Harmonize also the basses of Exercise 30.*

EXERCISE 30.



VII. Keyboard Harmony. The material for the keyboard work of this step has been assigned under Chord Building, III (3), page 45, and also in connection with Harmonizing Melodies and Harmonizing Basses.

VIII. Ear Training. [2–*e*] The material used for Chord Building, for Harmonizing Melodies, and for Melodic Invention is used also for ear training according to previous procedure.

(1) *Written Dictation, melodic and harmonic.*

(2) *Keyboard Dictation, melodic and harmonic.*

IX. Harmonic Analysis. [2–*f*] *Find examples of the dominant triad in hymns and piano pieces in minor keys, marking such chords with a V below the bass note.*

X. Free Composition. [2–*g*] *An assignment in free composition should be undertaken while the work of Chapter Six is being done.* Follow the directions of previous chapters. While not required, you are urged to undertake a composition in the minor mode at this time.

STEP THREE. *The Subdominant Triad in Minor*

I. Introductory Statement. The subdominant triad in minor keys is a minor triad in both the natural and the harmonic forms of the scale. Cadences and cadential progressions involving the tonic and subdominant triads require no additional instructions at this point. (See Figure 33.)

"Douce Plaint," Op. 100, No. 16. Burgmüller

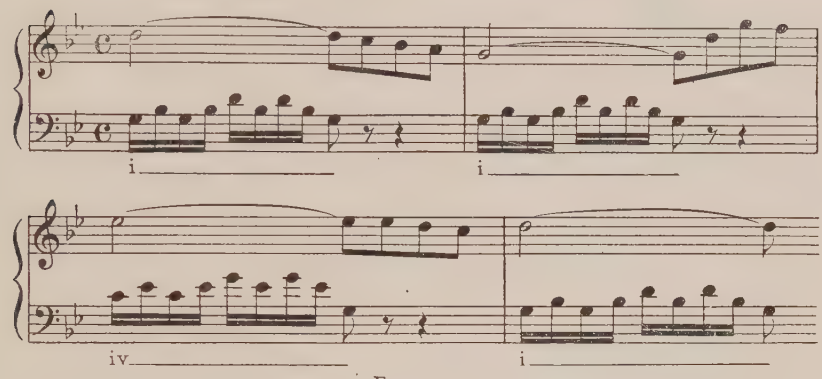



FIGURE 33

II. Melodic Patterns. The melodic patterns for this step will be the same as in major, *i.e.*, (*a*) 5–6–5; (*b*) 3–4–3; (*c*) 8–8–8; and (*d*) skips on the subdominant triad. The material of Chapter Three may become an assignment in minor merely by changing the key signature to that of the parallel (tonic) minor key.

III. Chord Building. [3–*a*] Playing and writing chords.

(1) **Spelling Triads.** *Spell the subdominant triad in thirteen minor keys.*

(2) **Writing Triads.** *Write the melodic patterns 5–6–5, 3–4–3, 8–8–8 in the following keys: A minor, E minor, E-flat minor, and B-flat minor. Harmonize the patterns as illustrated in Figure 34.*

(3) **Playing Triads.** *Play the progression, i–iv–i, in thirteen minor keys, employing the melodic patterns, 5–6–5, 3–4–3, and 8–8–8.* (See Figure 34.)

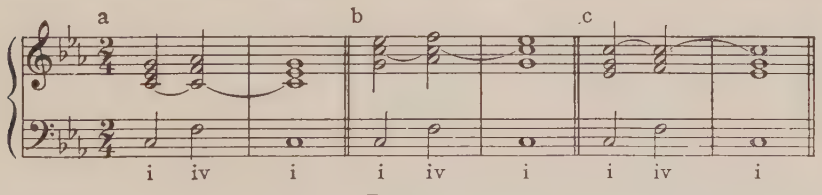
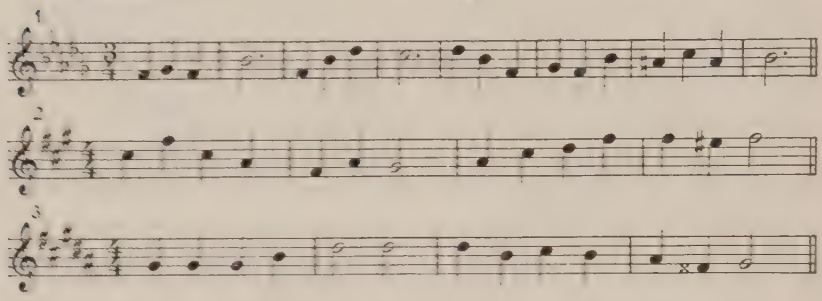


FIGURE 34

IV. Harmonizing Melodies. [3–*b*] *The melodies of Chapter Three, Exercises 13, 15, 17, and 19, are to be changed to the parallel, or tonic, minor keys by altering the key signatures.* These melodies are to be harmonized in

writing and at the keyboard in accordance with previous procedure. *Harmonize also the melodies of Exercise 31.*

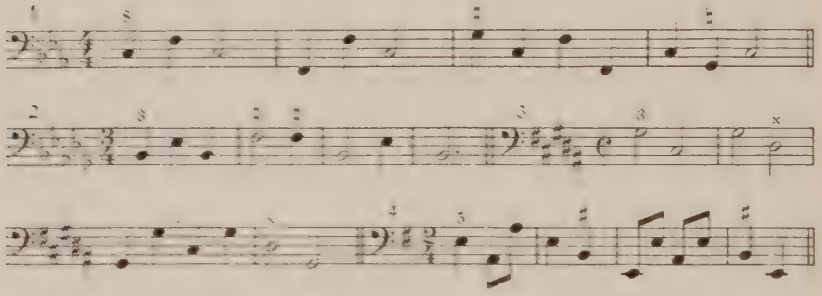
EXERCISE 31.



V. Melodic Invention. [3–d] *Invent four- or eight-measure melodies in minor keys, which shall include the harmonic progression, i–iv–i, with one or more of the following melodic patterns, 5–6–5, 3–4–3, 8–8–8, and skips along the subdominant triad.*

VI. Harmonizing Basses. [3–d] *For this assignment use the basses of Chapter Three, as given in Exercises 14, 16, 18, and 20, changing the key signatures so that they will be in the parallel minor key. Harmonize also the basses of Exercise 32.*

EXERCISE 32.



VII. Keyboard Harmony. The material for the keyboard work of this step has been assigned under Chord Building, III (3), above, and also in connection with Harmonizing Melodies and Harmonizing Basses. *Transpose your work in the latter two steps to various minor keys.*

VIII. Ear Training. [3–e] The material used for Chord Building, for Harmonizing Melodies, and for Melodic Invention is used also for ear training according to previous procedure.

(1) *Written Dictation, melodic and harmonic.*

(2) *Keyboard Dictation, melodic and harmonic.*

IX. Harmonic Analysis. [3–*f*] *Find examples of the subdominant triad in hymns and piano pieces in minor keys, marking such chords with an iv below the bass note.*

STEP FOUR. *The Progression iv–V in Minor*

I. Introductory Statement. The three primary triads in minor (i, V, and iv) have become familiar through the work of the preceding steps. You have learned that i and iv are minor triads. You know that, because of the need of a leading tone, the dominant triad, V, is made a major triad by means of an accidental, which changes the third of the chord (7 of the minor scale) to a pitch one half-step higher than its place in the natural form of the minor scale. With careful attention to these facts and with strict observance of the common tone principle and the contrary motion principle, you should be able to work the exercises of this step correctly. (See Figure 25, the Finale to Act IV, from Verdi's "Il Trovatore.")

II. Melodic Patterns. The melodic patterns for this step will be the same as in major, *i.e.*, (*a*) 8–8–7–8; (*b*) 5–6–5–5; (*c*) 3–4–2–3. The material of Chapter Four may become an assignment in minor by changing the key signatures to those of the parallel (tonic) minor keys.

III. Chord Building. [4–*a*] Playing and writing chords.

(1) **Writing Triads.** *Write the melodic patterns 8–8–7–8, 5–6–5–5, and 3–4–2–3, in the following keys: B minor, G minor, C minor, and F-sharp minor. Harmonize the patterns as illustrated in Figure 35.*

(2) **Playing Triads.** *Play the progression, i–iv–V–i, in thirteen minor keys, employing the melodic patterns, 8–8–7–8, 5–6–5–5, 3–4–2–3.* (See Figure 35.)

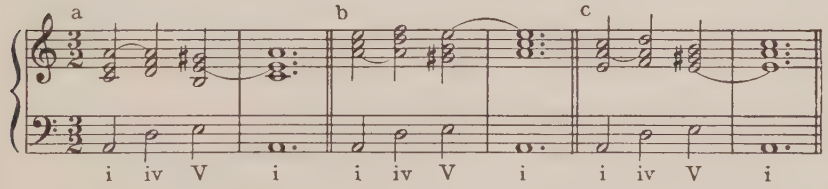
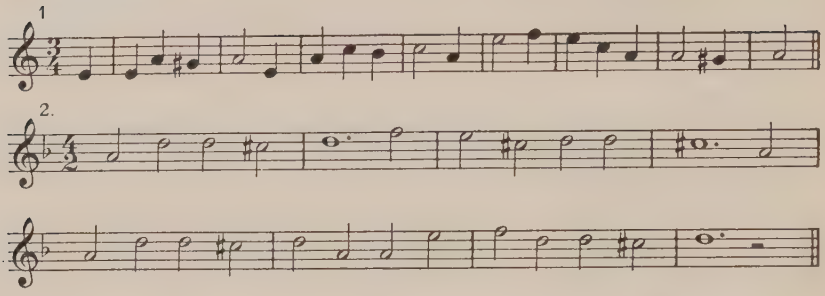



FIGURE 35

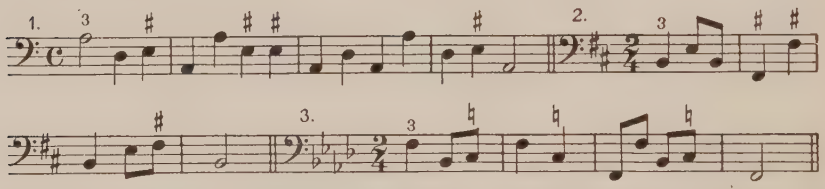
IV. Harmonizing Melodies. [4–*b*] *The melodies of Chapter Four, Exercises 21, 23, 25, are to be changed to the parallel (tonic) minor keys by altering the key signatures. These melodies are to be harmonized in writing and at the keyboard in accordance with previous procedure. Harmonize also the melodies of Exercise 33.*

EXERCISE 33.



V. Melodic Invention. [4–*c*] *Invent four- or eight-measure melodies in minor keys, which shall include the harmonic progression, i–iv–V–i, with one or more of the following melodic patterns, 8–8–7–8, 5–6–5–5, and 3–4–2–3.*

VI. Harmonizing Basses. [4–*d*] *For this assignment use the basses of Chapter Four, Exercises 22, 24, 26, changing the key signatures so that they will be in the parallel minor keys. Harmonize also the basses of Exercise 34.*

EXERCISE 34.

VII. Keyboard Harmony. The material for the keyboard work under this step has been assigned under Chord Building, III (2), above, and also in connection with Harmonizing Melodies and Harmonizing Basses. *Transpose your work in the latter two steps to various minor keys.*

VIII. Ear Training. [4–*e*] The material used for Chord Building, for Harmonizing Melodies, and for Melodic Invention is used also for ear training according to previous procedure.

(1) *Written Dictation, melodic and harmonic.*

(2) *Keyboard Dictation, melodic and harmonic.*

IX. Harmonic Analysis. [4–*f*] *Continue the search for examples of the primary triads in hymns and piano pieces in minor keys, noting particularly progressions from iv to V.* (See Figure 25.)

Anvil Chorus from "Il Trovatore." Verdi

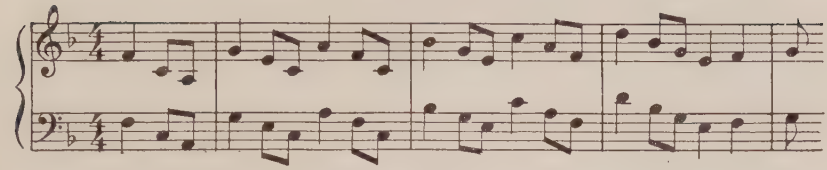



FIGURE 36

CHAPTER SEVEN

INTERVALS

STEP ONE. *General Classification of Intervals*

(*Numerical Names*)

The difference in pitch between two tones is called an *interval*. Melodies progress by intervals, and chords are composed of tones having interval relationships. It is important to recognize intervals readily and to sense their effect when produced in succession to make melodies or when combined simultaneously to make harmonies.

Intervals are named according to the number of staff degrees which they involve, or the number of letter-names of pitches which they encompass, inclusive of the tones themselves. For example, when an interval includes a note on the second line of the staff and another on the fourth space, it would be called a *sixth*, because that number of staff degrees is involved. The interval from *e* up to *b* is called a *fifth*, because in measuring the distance between the two tones it is necessary to use five letters, *e*, *f*, *g*, *a*, and *b*. (See Figure 37.)

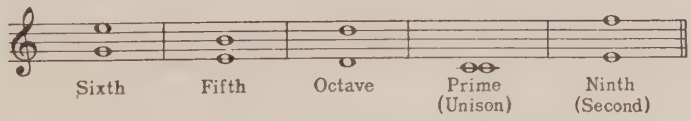



FIGURE 37

The interval of an eighth is called an *octave*.

The interval of a first is called a *prime*. When the two tones of a prime are identical in pitch, the relationship is called a *unison*.

Intervals larger than an octave are usually considered as reduced to their relationship within the octave; thus a ninth is usually considered a second. There are circumstances, however, which necessitate the use of the larger designation, as in the naming of certain organ stops, the twelfth, fifteenth, seventeenth, etc.

Melodies progressing in octaves are often said to be in unison. While not strictly correct terminology, general usage sanctions this designation.

You will observe that the two notes representing intervals named by odd numbers (3, 5, 7) will both occur on lines or on spaces while notes for intervals named by even numbers (2, 4, 6, and 8) will occur, one on a line and one on a space.

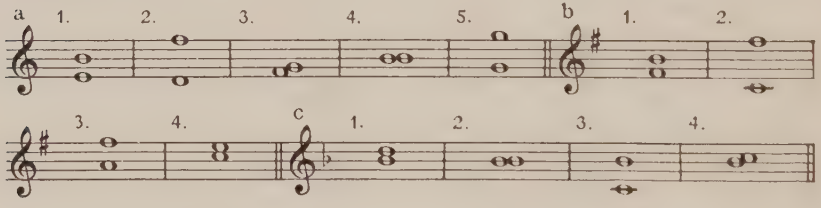
Much practice should be given in naming intervals, numerical names only. This is called the General Classification of Intervals.

[1–*a*] *Name the intervals in Figure 36, Exercise 35, and other similar intervals.*

[1–*b*] *Name the tone a fifth above d; a third above g; a sixth above a; a second above c; a fourth above f; an octave above e; a seventh above d; etc.*

[1–*c*] *Write a and the note a seventh above it; c and the note a fifth above it; f and the note a third above it; etc.*

EXERCISE 35.



STEP TWO. *Specific Classification of Intervals of the Major Scale; Perfect, Major, and Minor Intervals*

The study of major and minor keys has shown that there are different *kinds* of thirds, and doubtless you will realize that it is possible to make a further classification of all intervals. This will be called the Specific Classification of Intervals. When the upper tone of an interval fits into (belongs to) the major scale of which the lower tone is the keynote, the interval is either *perfect* or *major*. Under these conditions the unison, fourth, fifth, and octave are called *perfect;* the second, third, sixth, and seventh are called *major.*

[2–*a*] *Identify all perfect or major intervals in Figure 36.*

If you have studied physics you will remember that the perfect intervals are those which occur first in the series of overtones. It seems significant

that mankind has learned to appreciate intervals harmonically in the order in which Nature produces them as overtones. In the opinion of most historians, it seems that the Greeks could endure only the unison and the octave. The medieval musicians learned to tolerate the fourth and the fifth (organum), using thirds when there was no other way out of a difficulty. The third came to be appreciated later.

[2–*b*] *In order to simplify and clarify the classification of intervals, you should prepare a "Table of Intervals in the Major Scale" in accordance with the following directions:*

(1) Get a sheet of music paper containing at least twelve staves, and on each staff write the notes of the chromatic scale with certain enharmonic duplications as shown in Figure 38.

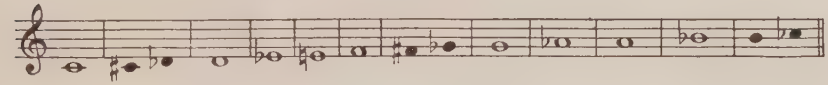



FIGURE 38

(2) Designate the first staff as "Major Seconds," the second staff as "Minor Seconds," the third staff as "Major Thirds," the fourth staff as "Minor Thirds," the fifth staff as "Perfect Fourths," the sixth staff as "Augmented Fourths," the seventh staff as "Perfect Fifths," the eighth staff as "Diminished Fifths," the ninth staff as "Major Sixths," the tenth staff as "Minor Sixths," the eleventh staff as "Major Sevenths," and the twelfth staff as "Minor Sevenths."

(3) Fill the table of perfect intervals, *i.e.*, fourths and fifths.

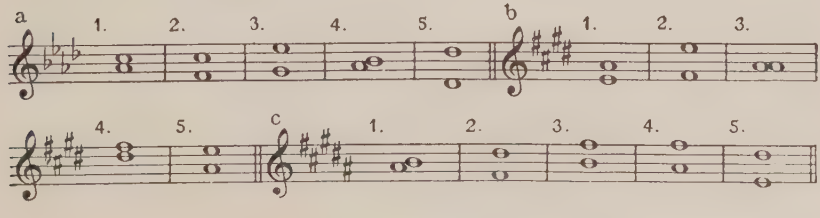
(4) Fill the table of major intervals, *i.e.*, seconds, thirds, sixths, and sevenths.

(5) Fill the table of minor intervals, *i.e.*, seconds, thirds, sixths, and sevenths.

It will not be necessary to construct tables of perfect primes (unisons) and octaves.

[2–*c*] *Name the intervals in Exercise 36. The keyboard should be used freely in all interval drill.*

EXERCISE 36.



STEP THREE. *Augmented and Diminished Intervals in the Major Scale*

Comfort Ye My People, from "The Messiah." Handel

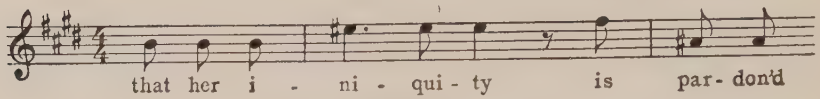


FIGURE 39

Every Valley, from "The Messiah." Handel

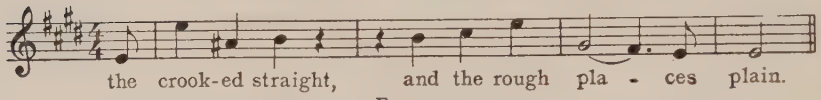


FIGURE 40

The study of the intervals of the major scale will bring to your attention certain instances not provided for thus far.

(1) Intervals a half-step greater in extent than perfect or major intervals are called *augmented.* (See Figure 39.)

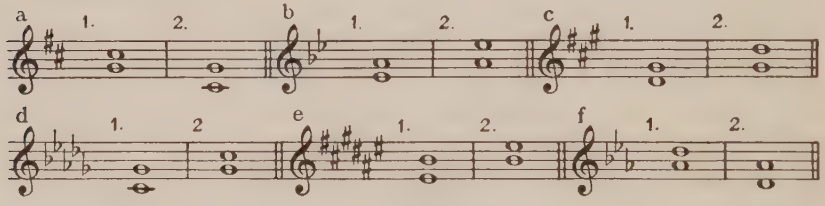
[3–*a*] *You may now fill in the table of augmented fourths on the Table of Intervals in the Major Scale.*

(2) Intervals a half-step less in extent than perfect or minor intervals are called *diminished.* (See Figure 40.)

[3–*b*] *You may now fill in the table of diminished fifths.*

[3–*c*] *Name the intervals in Exercise 37. The keyboard should be used freely in all interval drill.*

EXERCISE 37.



STEP FOUR. *Augmented and Diminished Intervals in the Harmonic Minor Scale*

The People That Walked in Darkness, from "The Messiah." Handel

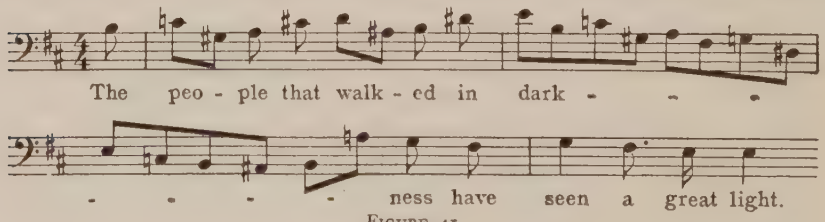


FIGURE 41

Because of the chromatic alteration of 7 of the harmonic minor scale, to provide for a leading tone, certain intervals occur which you have not yet classified in your table of intervals. (See Figure 42.)

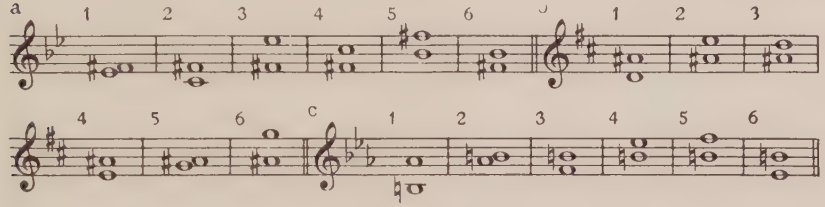


FIGURE 42

[4-*a*] A "*Table of Additional Intervals in the Harmonic Minor Scale*" *should be prepared as follows:*

(1) Another sheet should be prepared with the notes of the chromatic scale as given in assignment [2-*b*] of this chapter, this time on four staves.

(2) Designate the staves as follows: Augmented Seconds; Diminished Fourths; Augmented Fifths; Diminished Sevenths.

(3) Fill in the table of augmented intervals, *i.e.*, seconds and fifths, bearing in mind the statement of Step Three, 1. (The augmented fourth from 4 up to 7 is the same as in the major scale.)

(4) Fill in the table of diminished intervals, *i.e.*, fourths and sevenths, bearing in mind the statements of Step Three, 2. (The diminished fifth from 7 up to 4 is the same as in the major scale.)

STEP FIVE. *Specific Classification of Miscellaneous Intervals*

When determining the intervals according to the instructions of previous steps in this chapter, you found that the reckonings were made as though counting up from 1 of the major scale. It must be understood that the major scale, when used in this way, is simply a measuring rule, and does not indicate any particular key. It will take but a short time for you to become acquainted with the intervals of the major scale, and to know that from 3 to 5 is a minor third, from 2 to 6 a perfect fifth, etc.

Also, you will soon learn to reckon the intervals by their relationships on the piano keyboard and to visualize the keyboard in determining interval classification.

You may also count the number of intervening chromatic scale tones (half-steps) between one tone of an interval and another, and practice that form of reckoning in interval classification.

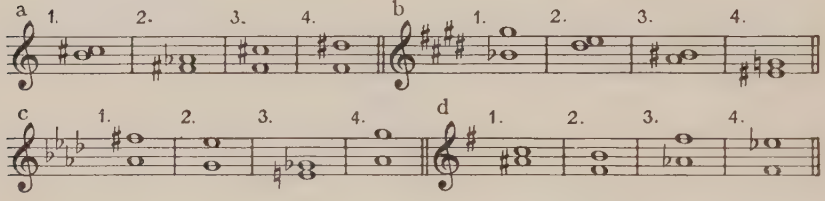
Any and all of these processes are serviceable in determining the classification of intervals, and may be employed as best suits your own methods of thought, both for intervals in the diatonic scale and for intervals involving

chromatic tones. It is well to discover and use the procedure with which you find you can make the best progress.

While it may be possible to build a number of intervals which have not yet been classified, the only ones which you are likely to meet are the diminished third and the augmented sixth.

[5–*a*] *Classify the intervals of Exercise 38.*

EXERCISE 38.



[5–*b*] A "*Table of Additional Miscellaneous Intervals*" *should be prepared by adding to the chromatic scale the series of diminished thirds and augmented sixths.*

[5–*c*] *Practice classifying intervals from all possible sources.*

The following statements will guide you in constructing augmented and diminished intervals:

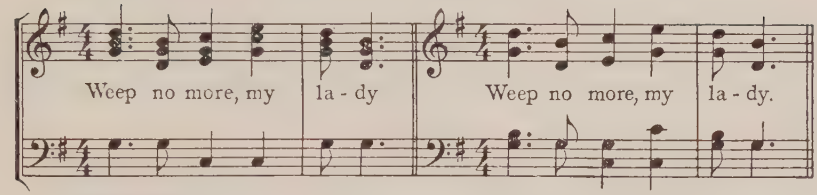
Perfect intervals increased one-half step become augmented intervals.

Perfect intervals decreased one-half step become diminished intervals.

Major intervals increased one-half step become augmented intervals.

Minor intervals decreased one-half step become diminished intervals.

My Old Kentucky Home. Foster



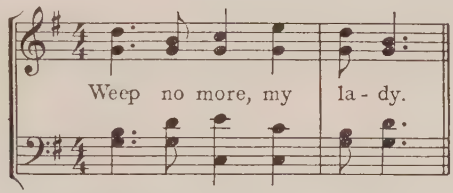
(a) Close Harmony (b) Mechanical Open Harmony

(c) Voice Leading; Mixed Open and Close Harmony

FIGURE 43

CHAPTER EIGHT

OPEN HARMONY

STEP ONE. *Voice Compass and Distribution*

Up to this point in the course the exercises have been described as " for piano playing," with three notes written for the right hand to play and one note for the left hand. In the study of music analysis, however, you have frequently been assigned music intended for voices, such as hymn tunes, in which a different arrangement of the parts generally appears. When the three upper parts of a chord are as close together as possible, the effect is called " close harmony." A chord is said to be in " open harmony " when the three upper parts extend over a compass of more than an octave.

In practical music for four voice parts, there is usually a more or less constant shifting between open and close harmony, so that the parts may conform to the voice compass of the singers and each part be more melodious and " singable." (See Figure 43.)

Since from this point on, the exercises of the course will make frequent use of open harmony, they should be considered as for voices, and the parts will be called Soprano, Alto, Tenor, and Bass. Moreover, consideration in your writing must be given to voice compass, for which the following is suggested:

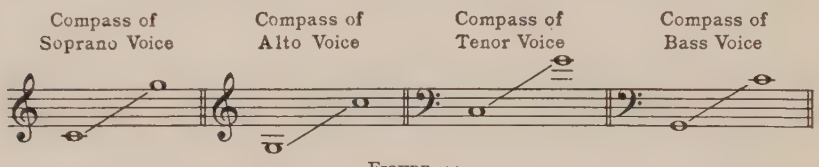


FIGURE 44

You will realize that this is merely a general statement for your present guidance, and that individual voices differ greatly in compass.

In writing the exercises which follow, the method used in most easy chorus music and hymnals will be followed, the soprano and alto voices appearing on the upper (treble) staff, and the tenor and bass voices on the lower (bass) staff.

[1–*a*] *Write the major triad of C for four voices in as many arrangements as possible, in both open and close harmony, conforming to the directions for voice compass and distribution given above.* The root of the triad will appear in the bass voice and also in one other voice ("double the root of the triad"). Any one of the three upper voices must never be more than an octave each from its neighbor, but the tenor may be any distance above the bass. Examples of this assignment are given in Figure 45. You will find it possible to add a number of additional examples.

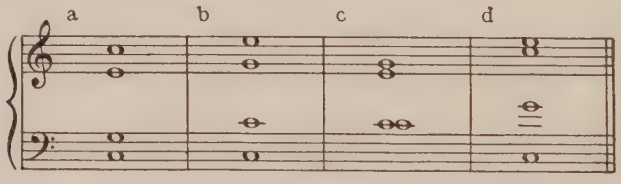
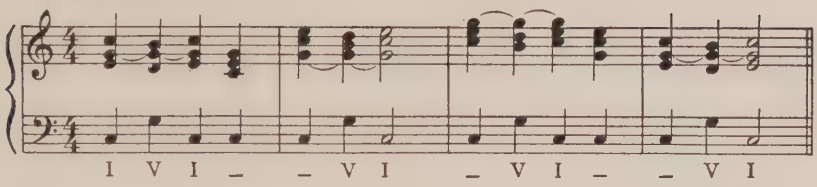


FIGURE 45

STEP TWO. *Mechanical Open Harmony*

Open harmony may be produced mechanically by writing the triads first in close position and then changing them to open position by transferring the second part an octave lower to the bass staff, thereby producing the tenor part of the chord in open position. The original melody will thus remain as the soprano, and the original third part becomes the alto. The bass is not changed unless the tenor should dip below it, in which case the bass may be written an octave lower. (See Figure 46.)

(a) Close Harmony



(b) Mechanical Open Harmony

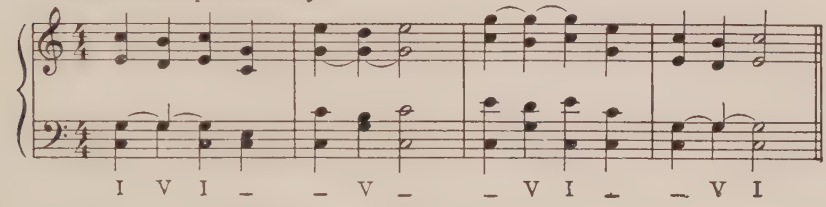
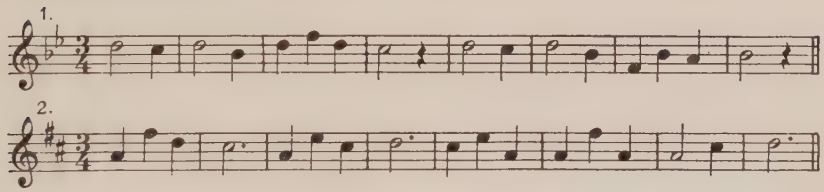



FIGURE 46

[2–*a*] *The procedure illustrated in Figure 46 is the one to be followed in harmonizing the melodies of Exercise 39.*

EXERCISE 39.



[2–*b*] *By the same procedure harmonize in open harmony the following melodies from the earlier chapters.*

Exercise 9, Nos. 1, 6; Ex. 13, No. 2; Ex. 17, No. 4; Ex. 19, No. 5; Ex. 21, Nos. 1, 7; Ex. 23, No. 2; Ex. 25, No. 4; Ex. 29, No. 1; Ex. 31, No. 3; Ex. 33, No. 1.

STEP THREE. *Introduction to "Voice Leading"*

While the procedure under Step Two produces a mechanical, or continuous, open harmony, it is musically ineffective for two important reasons: first, the transference of the second part to an octave lower will sometimes lead to a "crossing of the parts," that is, the tenor part thus formed will be lower than the bass. Such crossings should be avoided. Second, while skips in the melody are often quite effective and desirable, the inner voices, alto and tenor, are more "singable" if kept melodically as smooth as possible. You must think of the music as something to be sung, and therefore each part must be considered with respect to the convenience of the singer.

For both the above reasons it is frequently advisable and often necessary to rewrite the inner voices so as to produce what is known as good "part writing," or "voice leading." This rearrangement results in alternations of open and close harmony. (See Figure 43.)

The following rules will cover present procedure in modifying the mechanical open harmony so as to secure better voice leading.

(1) Harmonize the given melody in close harmony according to directions in preceding chapters.

(2) Transfer the second part an octave lower so that it appears on the bass staff as a tenor part, thereby producing mechanical open harmony.

(3) Where the voices are beyond, or in an ineffective part of, their compass, where voice crossings occur, or where awkward skips occur in the inner voices, adjust the part writing according to the following directions:

(*a*) Whenever a chord is repeated, the inner voices may be led to new arrangements without restriction except as to the requirement that the third and fifth of the chord be present and the root of the chord be doubled.

(*b*) Whenever the harmony changes, all voices must progress in strict accordance with the melodic figures studied in previous chapters.

Another excellent plan for the adjustment of voice leading is as follows:

(1) Harmonize the given melody in close harmony according to preceding directions, writing the third part as a tenor part upon the bass staff, regardless of high tones.

(2) Where the tenor voice is too high, *i.e.*, above the voice compass designated in Figure 44, change the chord to open position. Observe, however, that a change of position may occur only at a point where a chord (designated by a Roman numeral) is repeated.

Study carefully the examples shown in Figure 47, which illustrate voice leading as discussed above. It will be well first to work out the exercises yourself, and then compare them with these examples.

[3–*a*] *Harmonize in open harmony the following melodies from the earlier chapters according to the principles explained in this chapter. Employ both open and close harmony. The voice leading should be as smooth and melodious as you can make it.*

Exercise 9, Nos. 2, 4, 5; Ex. 11, Nos. 3, 5; Ex. 13, No. 4; Ex. 15, Nos. 2, 4; Ex. 17, Nos. 1, 2, 3, 5; Ex. 19, Nos. 3, 4; Ex. 21, Nos. 2, 3, 4, 5, 6, 8; Ex. 23, Nos. 1, 3, 4, 5; Ex. 25, Nos. 1, 2, 3; Ex. 29, Nos. 2, 3; Ex. 31, Nos. 1, 2; Ex. 33, No. 2.

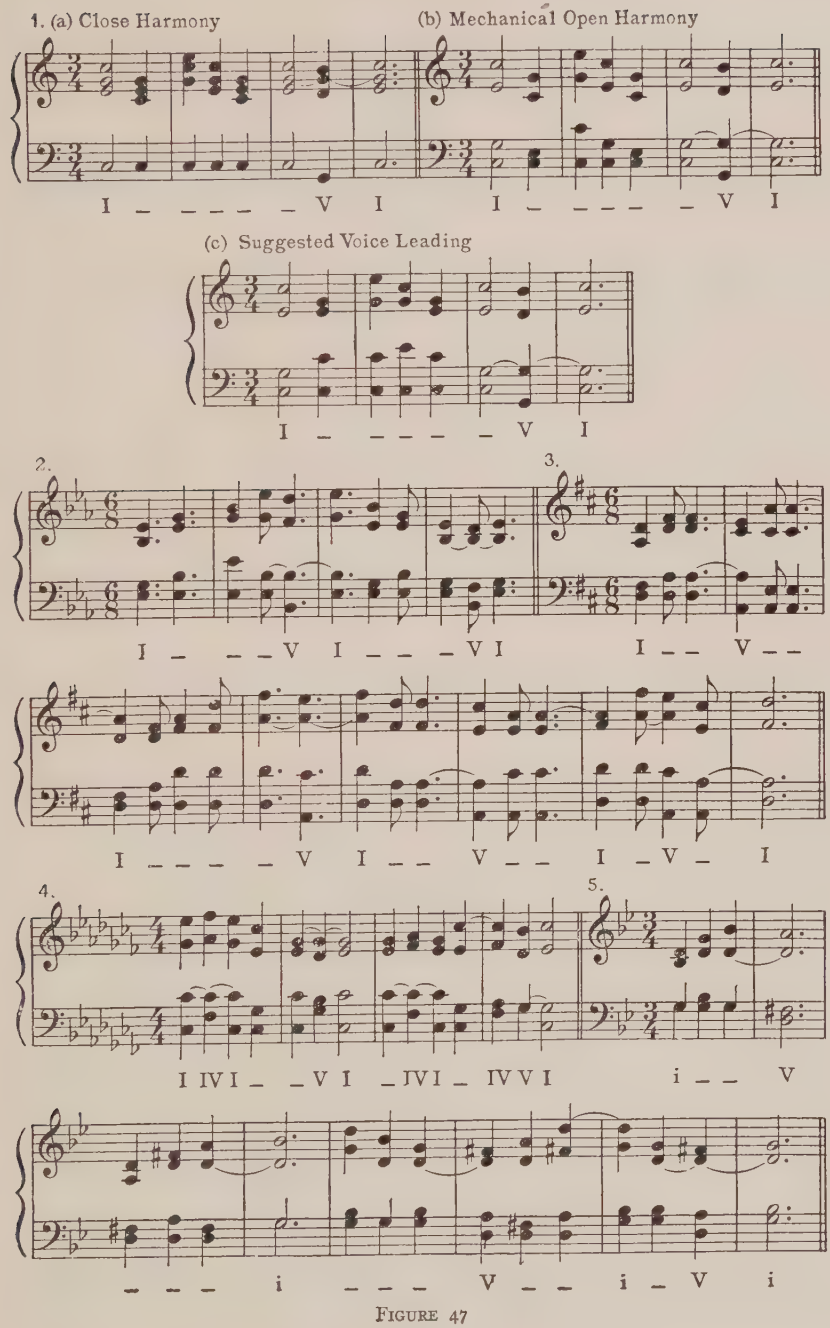

1. (a) Close Harmony
(b) Mechanical Open Harmony
I – – – – – V I
I – – – – – V I
(c) Suggested Voice Leading
I – – – – – V I
2.
I – – – V I – – – V I
3.
I – – V – –
I – – – – V I – – V – – I – V – I
4.
I IV I – – V I – IVI – IV V I
5.
i – – V
– – – i – – – V – – i – V i

FIGURE 47

Battle Hymn of the Republic. William Steffe

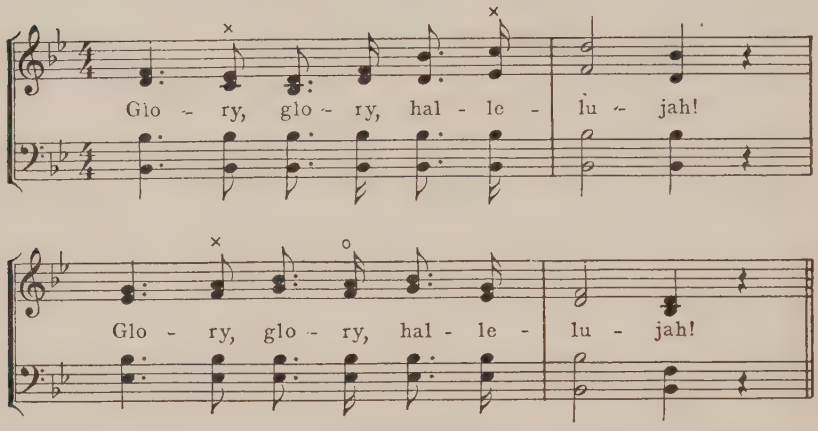



FIGURE 48

CHAPTER NINE

NON-HARMONIC TONES

A brief study of the quotation from the refrain of the familiar "Battle Hymn of the Republic" (Figure 48) will reveal that these measures are based upon two chords: the tonic triad is the underlying harmony for the first, second, and fourth measures, and the subdominant triad for the third measure. In the first and third measures of the quotation, however, we find a few tones which do not belong to these triads, tones which add to the flow of the music yet lie outside the triad content. Such tones, known as *non-harmonic tones*, are common in all music, even the simplest, and serve a number of useful purposes; such, for example, as adding smoothness to the melodic flow of the parts, serving as ornamental effects, and offering dissonant effects which make the following consonant harmonies all the more pleasing. By learning to recognize the non-harmonic tones of a composition you will be enabled readily to follow without confusion the harmonic movement of the piece. Sometimes a composition which appears very complex when dressed in its ornamentation of non-harmonic tones becomes relatively simple when reduced to its fundamental harmonic terms.

In the quotation from the "Battle Hymn of the Republic," non-harmonic tones will be found in the soprano and alto parts of the second and sixth

chords in the first measure, and the second and fourth chords in the third measure. By playing the excerpt with the non-harmonic tones omitted and comparing it with the original, you will realize the effectiveness of these tones. (See Figure 49.)

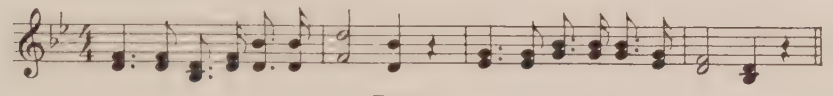


FIGURE 49

Non-harmonic tones are of various types, and are named according to the manner in which they function. In the present chapter non-harmonic tones in the melody will be the principal consideration.

STEP ONE. *Passing Tones*

Morning Mood from "Peer Gynt Suite." Grieg

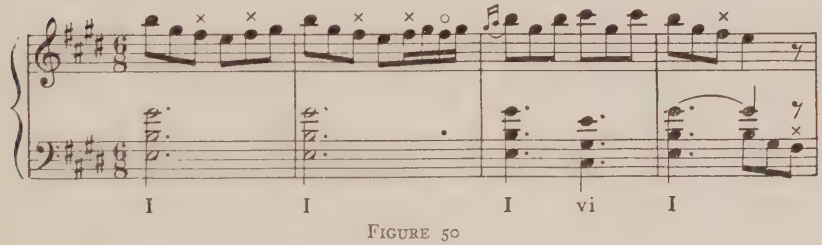



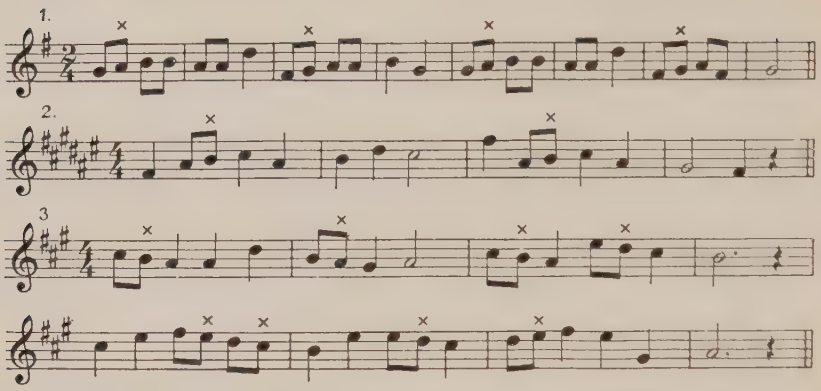
FIGURE 50

I. Introductory Statement. A *passing tone* effects a scalewise progression from one harmonic melody tone to another. In the opening measures of "Morning Mood," from Grieg's "Peer Gynt Suite," we find several tones which meet this description. They are indicated by the sign (×) which we shall use to mark passing tones. Observe also Figure 48, where in the first and third measures we find examples of passing tones in both the soprano and alto voices at the same time.

II. Chord Building. There is no assignment in this chapter. Since non-harmonic tones are purely melodic, the chords remain unchanged.

III. Harmonizing Melodies. [1 *a*] *Harmonize the melodies of Exercise 40. Write the harmony for four voices, with the tenor part on the bass staff.* When you harmonize melodies containing non-harmonic tones, you must remember to give the proper time value to the accompanying parts, *e.g.*, the first note of the alto, tenor, and bass parts of Exercise 40, No. 1, must be a quarter note corresponding to the value of the two eighth notes of the melody.

EXERCISE 40.



IV. Melodic Invention. [1–*b*] *Invent melodies of four or eight measures, using any of the harmonic material of the first four chapters of this course, introducing passing tones freely.* This process will offer you an opportunity to express yourself with more melodic fluency and originality than has previously been possible. The melodies should be harmonized for four voices.

V. Harmonizing Basses. [1–*c*] *Any of the basses of previous chapters may be used for both written and keyboard work.* The melodies should illustrate the topic, Passing Tones.

VI. Keyboard Harmony. Carefully play the material of all assignments, using various keys.

VII. Ear Training. [1–*d*] *This assignment involves melody rather than harmony.* Any of the melodies of previous chapters may be used with the addition of possible passing tones. The melody, with its accompanying harmony, is first played without the non-harmonic tones; then played in its complete form.

(1) *Written Dictation.*
(2) *Keyboard Dictation.*

VIII. Harmonic Analysis. [1–*e*] The assignments in harmonic analysis now become more varied and interesting than in previous lessons. Examples of non-harmonic tones may be found in many folk tunes and familiar piano classics; the piano material which you are studying will make an excellent assignment for analysis. All non-harmonic tones should be checked when recognized as not belonging to the harmonies, but the sign (×) is used especially to indicate passing tones. (See Figures 11, 16, 25, 33, 86 *a*, 87 *a*, 87 *b*, 103, and 113.)

IX. Free Composition. [1–*f*] *During your work on this chapter you should compose another piece of your own.* Previous directions continue here. It will be desirable that you strive for beauty and variety in your

compositions through the employment of non-harmonic tones, though this need not be considered a requirement.

STEP TWO. *Auxiliary Tones*

Toreador Song from "Carmen." Bizet

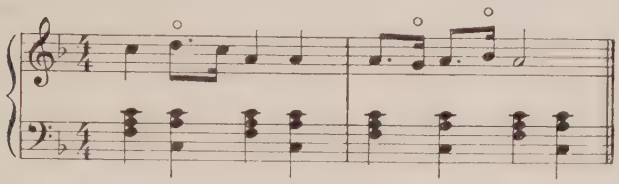
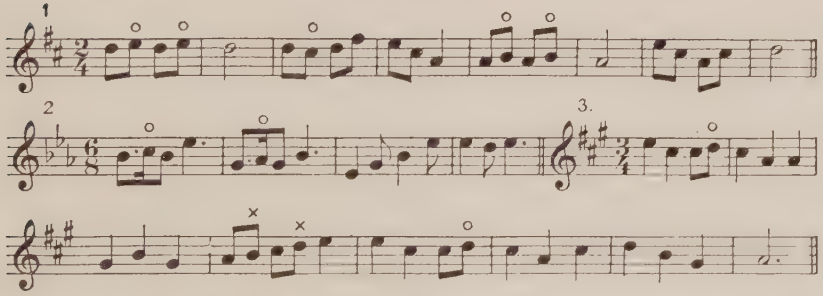


FIGURE 51

I. Introductory Statement. An *auxiliary tone* (indicated by °), is a neighboring tone which progresses from a harmony tone and returns to the same harmony tone. The auxiliary tone may progress by a whole or a half step, though it is usually chromatic when below the harmony tone. For the present it will be best for you to use only the auxiliary tone above the harmony tone, though you will find examples of the descending auxiliary tone in both Figures 48 and 51. Another excellent example of the whole step above will be found in the familiar Christmas carol, Silent Night.

II. Chord Building. No assignment.

III. Harmonizing Melodies. [2–*a*] *Harmonize for voices the melodies of Exercise 41.*

EXERCISE 41.

IV. Melodic Invention. [2–*b*] *Invent melodies of four or eight measures, using any of the harmonic material of the first four chapters of this course and introducing auxiliary tones freely. The melodies should be harmonized for four voices.*

V. Harmonizing Basses. [2–*c*] *Any of the basses of previous chapters may be used for both written and keyboard work. The melodies should illustrate the topic, Auxiliary Tones.*

VI. Keyboard Harmony. *Carefully play the material of all assignments, employing various keys.*

VII. Ear Training. [2-d] Any of the melodies of previous chapters may be used with the addition of possible auxiliary tones, together with the melodies of Exercise 41. The melody, with its accompanying harmony, is first played without the non-harmonic tones, then played in its complete form.

(1) *Written Dictation.*
(2) *Keyboard Dictation.*

VIII. Harmonic Analysis. [2-e] *In your harmonic analysis check all non-harmonic tones when recognized as such, but use the sign* (○) *especially to indicate auxiliary tones.* (Continue the use of (×) to indicate passing tones. See Figures 11, 14, 25, and 99.)

STEP THREE. *Appoggiaturas*

Narcissus. Ethelbert Nevin

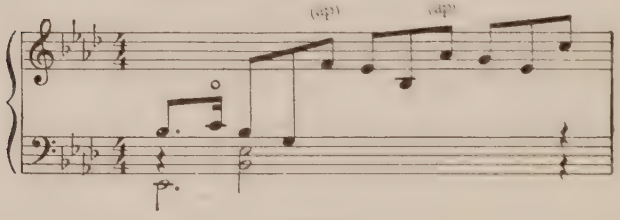



FIGURE 52

I. Introductory Statement. An *appoggiatura* is a non-harmonic tone adjacent to the chord tone to which it resolves. When resolving scale-wise downward, it is usually preceded by an upward leap and appears as the non-harmonic tone next above the harmony tone which is its final objective. Formerly composers indicated the appoggiatura by a small note which was expected to receive one half of the value of the note with which it appeared. Present-day composers indicate the exact note value as they intend it to be performed. There is such difficulty in distinguishing between the appoggiatura and the accented passing tone, that we shall use the term "appoggiatura" in this course for only those non-harmonic tones which are introduced by a leap. The appoggiatura usually sounds at the same time as the chord, and then resolves into the chord tone, as in Figure 53, though the non-harmonic tones of Figure 52 should be classified as indicated. There are also chromatic appoggiaturas. The letters "ap" will be used to indicate appoggiaturas.

II. Chord Building. No assignment.

Example of appoggiatura from Haydn's "Creation" written as a small note

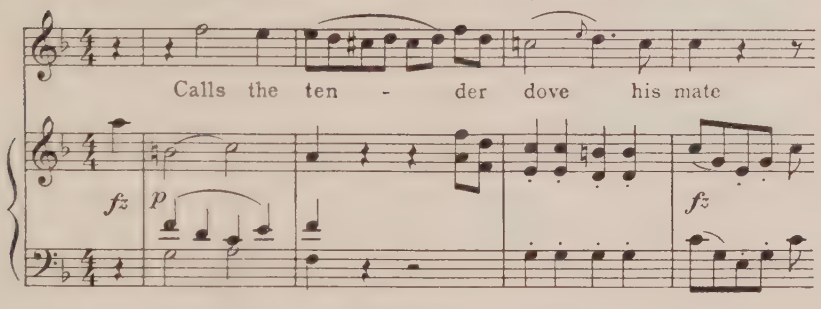
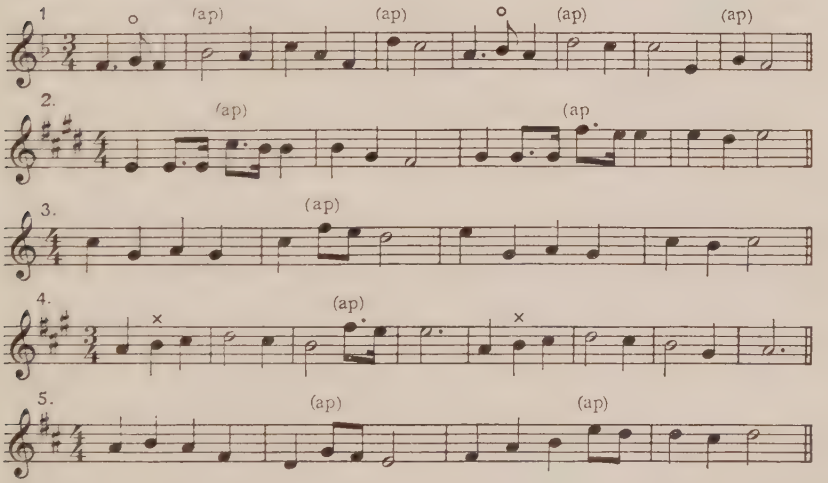


FIGURE 53

III. Harmonizing Melodies. [3-*a*] *Harmonize for voices the melodies of Exercise 42.*

EXERCISE 42.



IV. Melodic Invention. [3-*b*] *Invent melodies of four or eight measures, using any of the harmonic material of the first four chapters of this course and introducing appoggiaturas freely.* The melodies should be harmonized for four voices.

V. Harmonizing Basses. [3-*c*] *Any of the basses of previous chapters may be used for both written and keyboard work.* The melodies should illustrate the topic, Appoggiaturas.

VI. Keyboard Harmony. *Play carefully the material of all assignments, using various keys.*

VII. Ear Training. [3-*d*] Any of the melodies of previous chapters may be used with the addition of possible appoggiaturas, as well as the

melodies of Exercise 42. The melody with its accompanying harmony is first played without the non-harmonic tones, then played in its complete form.

(1) *Written Dictation*
(2) *Keyboard Dictation.*

VIII. Harmonic Analysis. [3–*e*] *Check all non-harmonic tones, but use the letters "ap" to indicate appoggiaturas.* Good examples of appoggiaturas will be found in Schubert's "Hark! Hark! the Lark!"; Number Two of Strauss' "Beautiful Blue Danube"; Chaminade's "Flatterer"; etc.

STEP FOUR. *Suspensions*

Final "Amen" from "The Messiah." Handel

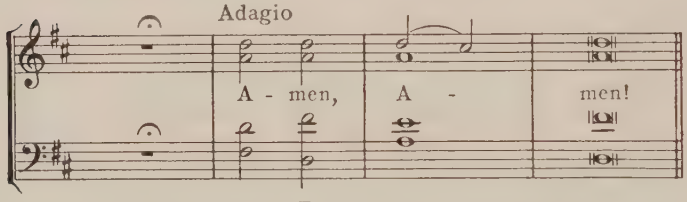



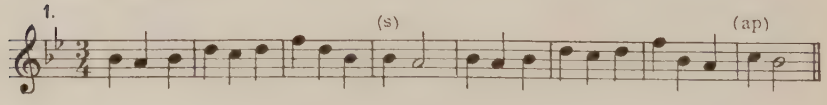
FIGURE 54

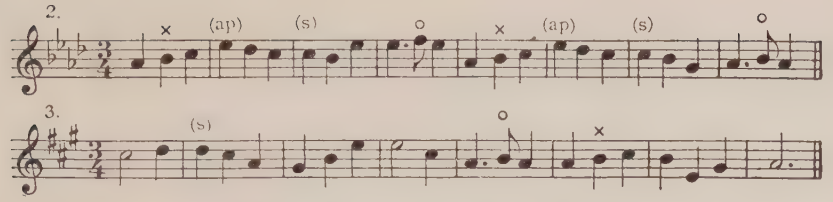
I. Introductory Statement. A *suspension* is a tone whose resolution is delayed while the other tones of the chord to which it belongs pass to their places in the new chord. This delayed resolution produces a non-harmonic tone, which must later progress to its proper place in the harmony. A suspension has three parts: (*a*) the *preparation*, the tone as it appears in the preceding chord in the same voice; (*b*) the *suspension*, the actual non-harmonic tone; and (*c*) the *resolution*, the expected harmonic tone of the final chord. Suspensions usually resolve downward diatonically. Observe the suspension in Figure 54, noting the preparation, suspension, and resolution. Find the suspension in the tenth measure of "America, the Beautiful" (Tune, Materna). In instrumental music the suspension is usually indicated by a tie; also frequently in vocal music. The letter "s" will be used in this course to indicate suspensions.

II. Chord Building. No assignment.

III. Harmonizing Melodies. [4–*a*] *Harmonize for four voices the melodies of Exercise 43.*

EXERCISE 43.





IV. Melodic Invention. [4 *b*] *Invent melodies of four or eight measures, using any of the harmonic material of the first four chapters of the course and introducing suspensions freely.* The melodies should be harmonized for four voices.

V. Harmonizing Basses. [4–*c*] *Any of the basses of previous chapters may be used for both written and keyboard work. The melodies should illustrate the topic, Suspensions.*

VI. Keyboard Harmony. *Play carefully the material of all assignments, using various keys.*

VII. Ear Training. [4–*d*] *Any of the melodies of previous chapters may be used with the addition of possible suspensions, as well as the melodies of Exercise 43.*

(1) *Written Dictation.*

(2) *Keyboard Dictation.*

VIII. Harmonic Analysis. [4–*e*] *Check all non-harmonic tones, using the letter "s" for suspensions, as well as the other signs studied, when proper examples are found.* Good examples of suspensions will be found in Sullivan's "Lost Chord"; The Minuet from Haydn's "Military Symphony"; Wagner's "To the Evening Star"; the introduction to Handel's "Hallelujah Chorus"; Handel's "Largo"; the first Two-Part Invention of Bach (see Figures 59, 103, and 113); etc.

STEP FIVE. *Anticipation*

Sonata in G major: Op. 49, No. 2, Second Movement. Beethoven

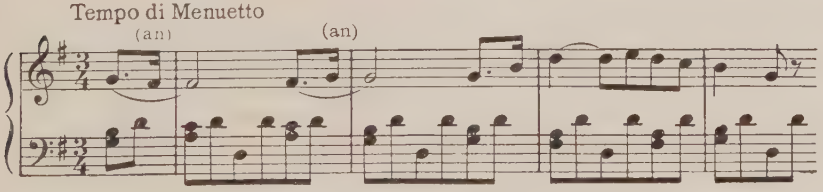


FIGURE 55

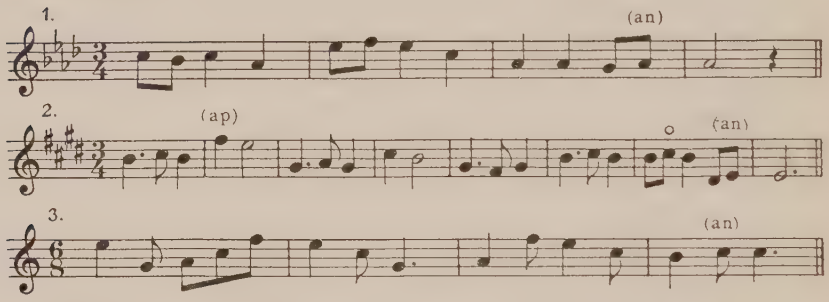
I. Introductory Statement. An *anticipation*, or anticipatory tone, resolves to its place in the following harmony in advance of the other parts of the chord. It is quite common in the closing cadence of melo-

dies, as, for example, in "Annie Laurie." It also occurs in the course of a melody, as in Figure 55. The letters "an" will be used to indicate anticipations.

II. Chord Building. No assignment.

III. Harmonizing Melodies. [5–*a*] *Harmonize for four voices the melodies of Exercise 44.*

EXERCISE 44.



IV. Melodic Invention. [5 *b*] *Invent melodies of four or eight measures, using any of the harmonic material of the first four chapters of the course and introducing anticipations freely.* The melodies should be harmonized for voices.

V. Harmonizing Basses. [5–*c*] *Any of the basses of previous chapters may be used for both written and keyboard work.* The melodies should illustrate the topic, Anticipation.

VI. Keyboard Harmony. *Play carefully the material of all assignments, using various keys.*

VII. Ear Training. [5–*d*] Any of the melodies of previous chapters may be used with the addition of possible anticipations, as well as the melodies of Exercise 44.

(1) *Written Dictation.*

(2) *Keyboard Dictation.*

VIII. Harmonic Analysis. [5–*e*] *Check all non-harmonic tones, using the letters "an" for anticipations, and the other signs studied thus far.* Good examples of anticipations will be found in "Home, Sweet Home"; in the Triumphal March from Verdi's "Aïda"; and in the second movement of Beethoven's "Moonlight Sonata."

STEP SIX. *Miscellaneous Non-Harmonic Tones*

I. Introductory Statement. An additional statement with respect to non-harmonic tones should be made on these two points: first, the five-fold classification of non-harmonic tones previously given in this chapter does

not cover all types that you will find even in simple music; and second, the description which has been given of each of the several types of non-harmonic tones does not cover all of the ways in which even these types may appear.

II. Other Types of Non-Harmonic Tones. *(a)* **Changing Tones.** A *changing tone* is a non-harmonic tone which progresses scalewise from its place in the chord and then finds its harmonic resolution by a leap. An excellent example appears in the first phrase of the old English folk song, "The Bailiff's Daughter of Islington," where the first motive progresses scalewise and is then repeated with an ornamentation of changing tones. (See Figure 56.) Other examples will be found in the Largo from Dvořák's "New World Symphony"; Schumann's "Two Grenadiers"; the Overture to Weber's "Der Freischütz"; Nevin's "Narcissus"; Trotere's "In Old Madrid"; etc. [6–*a*] *Find them, and mark them with the letters "ch."* (See Figure 28.)

The Bailiff's Daughter of Islington

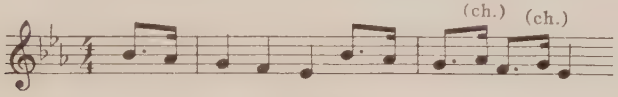



FIGURE 56

(b) **Organ Point.** This type of non-harmonic tone is also called the *pedal point*. It is a tone in the bass which continues sounding while the parts above proceed in a development which occasionally is at variance with it. Organ music is especially rich in this device; hence the name. Observe the introduction to Sullivan's "The Lost Chord," which contains not only a fine example of the organ point but also a number of excellent illustrations of other non-harmonic tones. (See Figure 57; also Figure 11.)

Introduction, "The Lost Chord." Sullivan

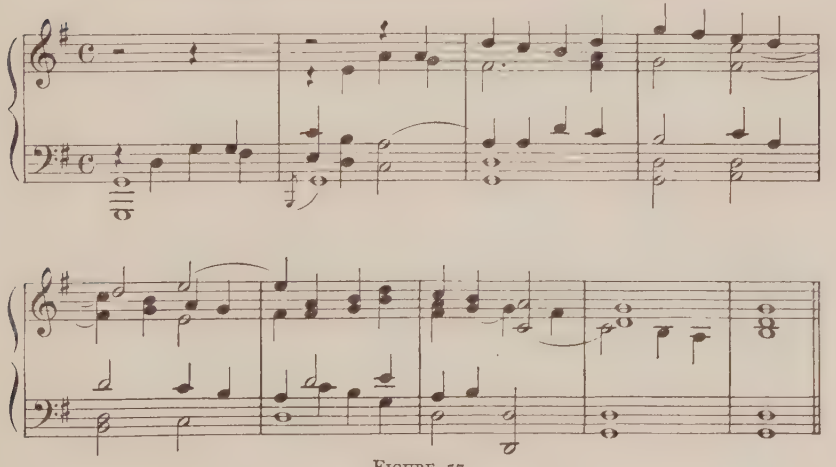
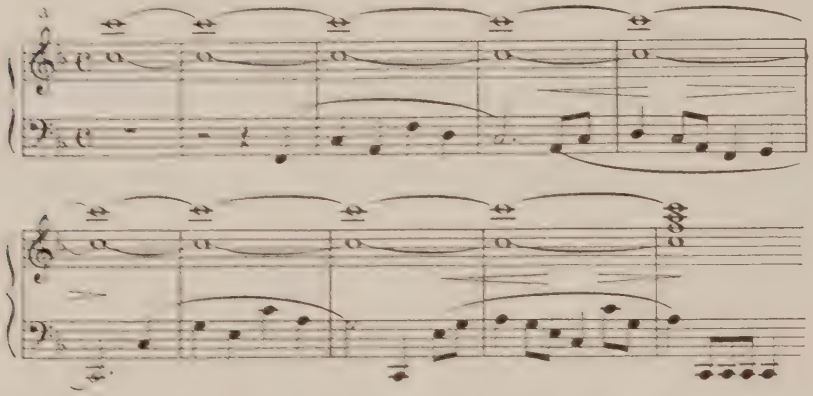


FIGURE 57

(c) **Stationary Tones.** When a sustained tone occurs in an upper or middle part, it is called a *stationary tone*. (See Figure 58.) Sometimes the effect is called an inverted pedal point.

Overture, "Merry Wives of Windsor." Nicolai

Andantino Moderato

Song without Words, No. 23. Mendelssohn

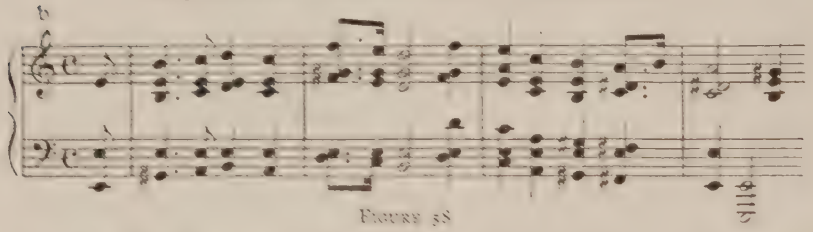



FIGURE 58

(d) **Melodic Figuration.** The embellishment of a melody by the use of various types of non-harmonic tones, especially when the ornamentation appears in the form of sequential groups of tones, is called *melodic figuration*. Scale passages also frequently fall into this general category. Figures 59 and 60 give examples of two types of melodic figuration.

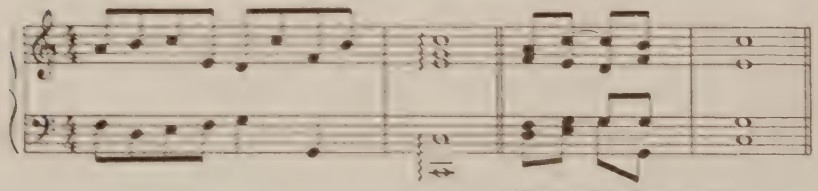
The first Two-Part Invention. Bach

(Reduced to four parts)

FIGURE 59

In Figure 60 the harmonic background of the elaborate vocal melody is shown in the accompaniment, which, you will observe, is a very simple chord pattern.

Rejoice Greatly, from "The Messiah." Handel

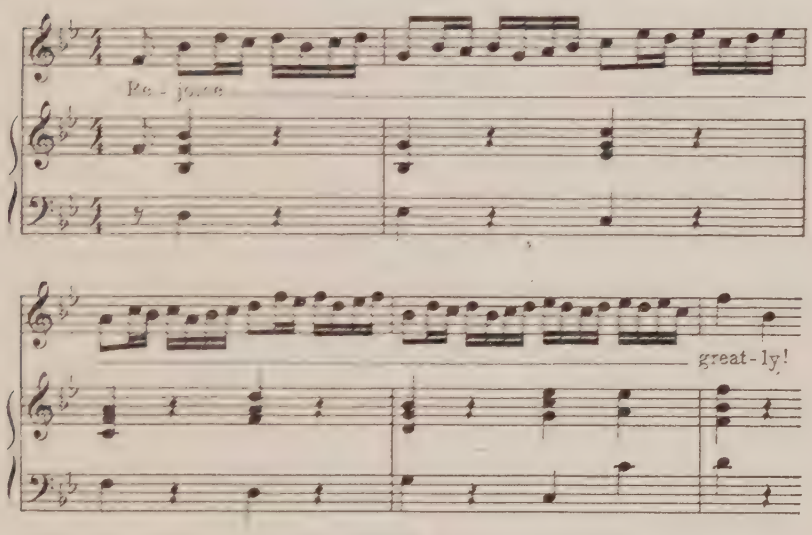


FIGURE 60

III. Harmonic Analysis. The study of changing tones, organ point, stationary tones, and melodic figuration should be chiefly in the form of harmonic analysis. You will be asked merely to recognize obvious examples of these devices as they occur in your piano studies and in the other music which you use in your school work.

STEP SEVEN. *Further Study of Non-Harmonic Tones*

I. Introductory Statement. The study of passing tones, auxiliary tones, appoggiaturas, suspensions, and anticipations, as given in this chapter, demonstrated the more usual and conventional forms in which these types of non-harmonic tones appear. In your piano studies and in other music which you hear, these types frequently occur in a variety of other ways. You should be acquainted with these varied forms of the above-listed non-harmonic tones so that you may recognize them in your musical experiences, but your studies of the less usual forms will be confined at this time to harmonic analysis. Employ freely any of these types and forms in your free composition when the impulse comes to do so, but do not struggle to introduce them unless they occur to you spontaneously.

II. A Helpful Classification. The following classification of the more

usual appearances of the five chief types of non-harmonic tones may be helpful:

(1) Non-harmonic tones appearing with the chord:
suspension
appoggiatura (usually)

(2) Non-harmonic tones appearing after the chord (between chords)
passing tones
auxiliary tones

(3) Non-harmonic tones appearing before the chord:
anticipation

III. Exceptions and Extensions. That this classification, as well as the description given earlier in the chapter, has many exceptions will be shown by the following further description:

(1) **Passing Tones.** (*a*) They may be chromatic as well as diatonic. (See Figure 61; also Figure 79.)

(*b*) Although usually coming between chords, and therefore unaccented, passing tones may also occur at the same time with the chord. In this case they are called *accented passing tones*. (See Figure 62.) By some theorists an accented passing tone is called an appoggiatura. In this course, however, the term "appoggiatura" is limited to those non-harmonic tones which are introduced by a leap.

(*c*) The passing tone may occur between the harmonic tones of two different chords. (See Figure 63.)

The extensive use in instrumental compositions of passing tones in diatonic and chromatic scale passages gives grace and lightness to the music.

Spring Song. Mendelssohn

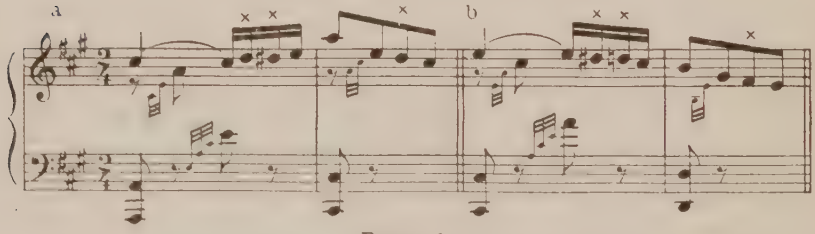



FIGURE 61

Sonatina. Clementi

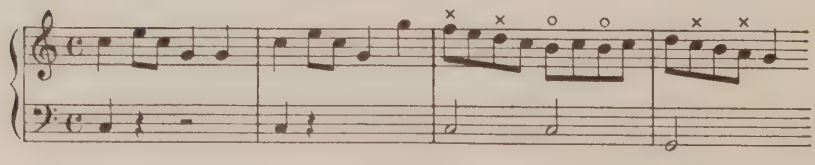


FIGURE 62

The melody tone of the second chord in Figure 63 may be considered as a passing tone between two different chords, although it admits of another analysis.

All Through the Night. Owen

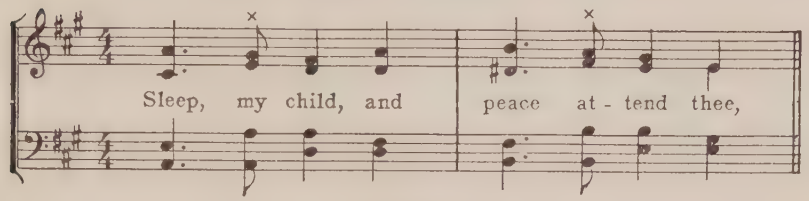


FIGURE 63

(2) **Auxiliary Tones.** Excellent examples of descending chromatic auxiliary tones will be found in the first phrases of Beethoven's Minuet in G (see Figure 64) and Chaminade's Scarf Dance.

Minuet in G. Beethoven

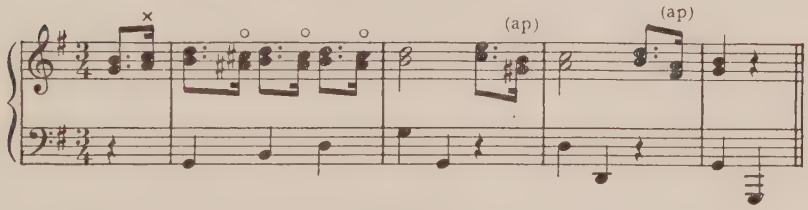



FIGURE 64

(3) **Appoggiatura.** It may appear above or below its tone of resolution, and may be diatonic or chromatic. (See Figure 64.) The appoggiatura, when written as a small note (see Figure 53), should not be confused with the acciaccatura, which is performed as briefly as possible, and which may be distinguished by a stroke through the stem of the small note. (See Figures 1 and 65.) The acciaccatura is sometimes called a "grace note."

Anvil Chorus from "Il Trovatore." Verdi

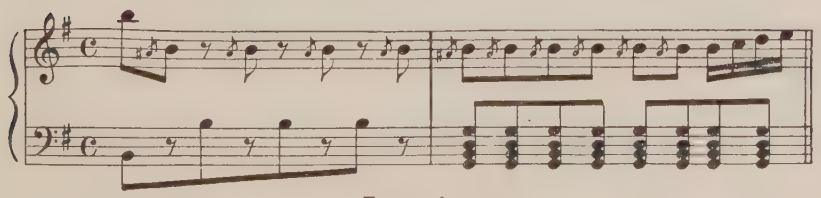


FIGURE 65

(4) **Suspension.** There are suspensions with upward as well as downward resolutions. Suspensions may appear simultaneously in two, or even in three parts. (See Figure 66.) Such effects are found frequently in slow movements of compositions of the classic period.

All Saints. Cutler

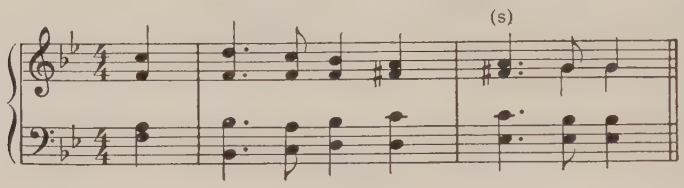


FIGURE 66

(5) **Anticipation.** It may occur in several parts. When all the parts progress to another chord before the expected time, the effect is of a rhythmic rather than a harmonic anticipation. (See Figure 67.)

He Was Despised, from "The Messiah." Handel

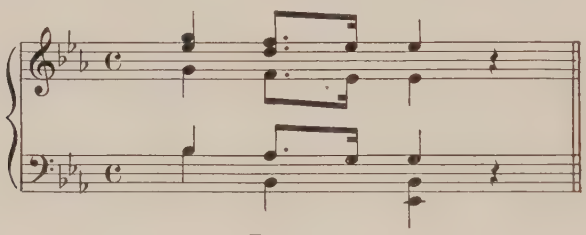



FIGURE 67

STEP EIGHT. *Non-Harmonic Tones in Minor*

I. Introductory Statement. Non-harmonic tones in minor are to be treated in all respects the same as in major. The one new feature in this step is the employment of the melodic minor scale which, in ascending passages, avoids the unmelodic interval of an augmented second, found between 6 and 7 of the harmonic minor scale.

Funeral March. Chopin

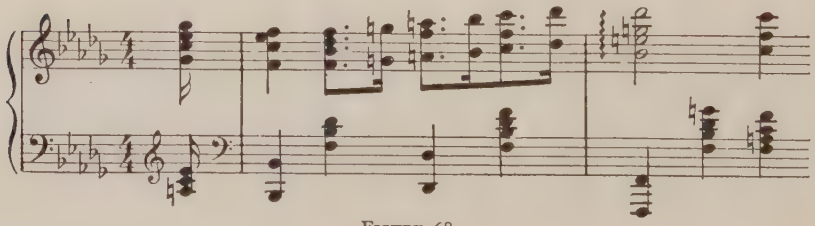


FIGURE 68

II. The Melodic Minor Scale. The *melodic minor scale* differs from the natural and the harmonic forms of the minor scale in its upper tetrachord; that is, in its four upper tones. The lower tetrachord is the same in the three forms of the minor scale.

The ascending form of the upper tetrachord of the melodic minor scale retains the leading tone of the harmonic minor scale, but avoids the augmented second of that scale by means of an accidental, changing 6 so that it becomes a *whole step* higher than 5. Thus the ascending upper tetrachord becomes: 5 to 6, a step; 6 to 7, a step; 7 to 8, a half-step. You will observe that the ascending upper tetrachord of the melodic minor scale is identical with the ascending upper tetrachord of the major scale. See Figures 68 and 153.

The necessity for a leading tone disappears in a descending passage from 8 to 5. The descending upper tetrachord of the melodic minor scale is, therefore, the same as in the natural minor scale; 8 to 7, a step; 7 to 6, a step; 6 to 5, a half-step.

Melodic Minor Scale, Key of C minor

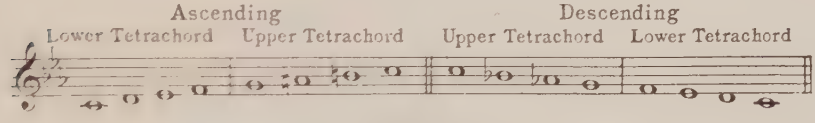


FIGURE 69

III. Scale Building. [8-*a*] *Build the melodic minor scale in the following minor keys: A, E, B, F-sharp, D, C, G, F, B-flat.*

IV. Use of Non-Harmonic Tones in Minor. For drill in the use of non-harmonic tones in minor keys, material selected from Exercises 27 to 34, inclusive, may be used by adding non-harmonic tones to the given melodies. Also the analysis of compositions in the minor mode is recommended with particular attention to the treatment of the non-harmonic tones. See Figures 82 *a* and 82 *b*.

Vesper Hymn. Bortniansky

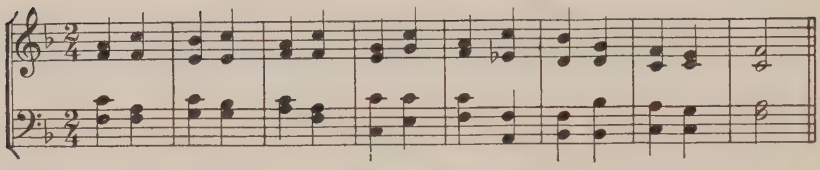



FIGURE 70

CHAPTER TEN

THE SECOND INVERSION OF THE TONIC TRIAD IN CADENCES

STEP ONE. *The I_4^6 Chord in Three-Chord Cadence*

I. Introductory Statement. Figure 70 gives the first two phrases of the familiar "Vesper Hymn" by Bortniansky. The second phrase closes with the melodic pattern, 8–7–8, harmonized according to previous practice with I–V–I, but with this difference: instead of the first tonic triad appearing with its root in the bass as in all previous examples of this pattern, the fifth of the chord now appears as the bass tone. Play Figure 70 and observe the effect of this arrangement of the chord.

For the sake of comparison play Figure 71, which is the same progression rewritten in the manner of our former exercises, with the root of the triad as bass tone in each instance. You will readily recognize the stronger effect of finality in the cadence of Figure 70, due to the fact that this new arrangement of the bass warns the listener of the impending close of the phrase.

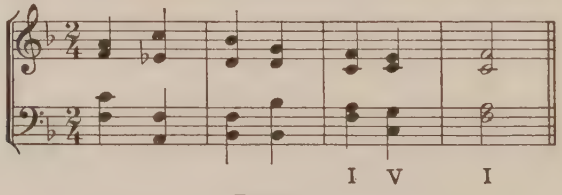


FIGURE 71

As a further experiment play the tonic triad as given in Figure 72 *a*. When the triad is heard thus, alone, there is no indication to the ear that another chord is to follow. Then play the first chord of Figure 72 *b*. This

is the same chord but with its fifth as bass tone. Observe that there is now a strongly expectant effect, the chord demanding a resolution to another chord built upon the same bass tone (5) as root, or, in other words, demanding a resolution to the dominant triad. In turn the dominant triad demands its resolution to the tonic triad.

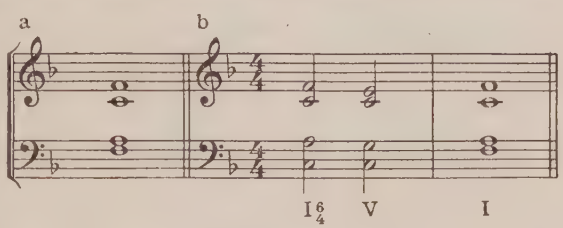


FIGURE 72

When the fifth of the tonic triad appears as bass tone, the triad is said to be in the *second inversion*, and frequently is referred to as the I^6_4 chord. This means that the two other tones of the chord may be reduced to the intervals of a sixth and a fourth above the bass note. (A more extended discussion of this matter appears later, in the chapter on Inversions.)

When the second inversion of the tonic triad (the I^6_4 chord) is used in the cadence preceding the dominant triad, it has the effect of greatly strengthening this already strong closing progression. Because of this feeling of finality, the I^6_4 chord should not be used indiscriminately in chord progressions of I–V–I, but should be reserved for use at the end of a phrase only.

In Figure 73, the I^6_4 chord appears in the last measure of the quotation from the "Missionary Hymn." In this, as in the previous example, the I^6_4 chord leads the ear to expect a resolution to the dominant triad, but the effect of finality is moderated to compare with that of a comma rather than a period by the entrance of the dominant triad on a strong beat of the measure instead of on a weak beat, as before. (This effect, found only during the progress of a composition, is known as a half cadence.)

Missionary Hymn. Lowell Mason

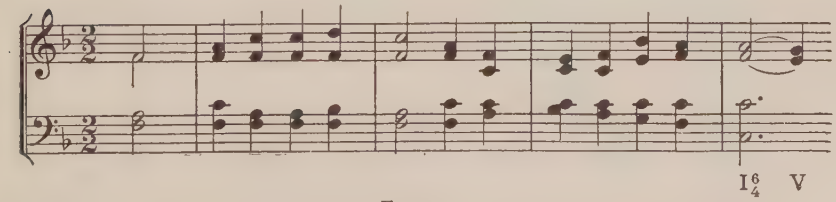


FIGURE 73

II. Chord Building. [1–*a*] *Write and play the tonic triad in the second inversion (the I^6_4 chord) in all major keys.* Vary the chord arrangement so that each of the three tones of the triad may appear in turn as melody tone, and also so that both close and open position will be used. In the

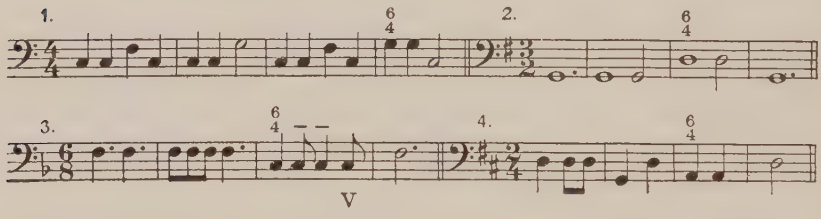
second inversion of the tonic triad, 5 of the scale appears both as bass tone and also in one of the other voices.

III. Harmonizing Melodies. [1–*b*] *The melodies of Exercise 5 are well adapted to harmonizing with the use of the* I^6_4 *chord in the closing cadence.*

IV. Melodic Invention. Because this chapter deals with the bass line and not the melody, no new instruction need be given in melodic invention.

V. Harmonizing Basses. [1–*c*] *Harmonize the basses of Exercise 45 with all the freedom allowed by the procedure up to this point.*

EXERCISE 45.



VI. Keyboard Harmony. [1–*d*] *Play the progression* $I–I^6_4–V–I$ *in all major keys with 8, 5, and 3 in turn as beginning soprano tone.* All written work of this chapter should be practiced at the keyboard.

VII. Ear Training. [1–*e*] *The exercises of this chapter are to be used as material for dictation, according to previous directions.*

(1) *Written Dictation.*
(2) *Keyboard Dictation.*

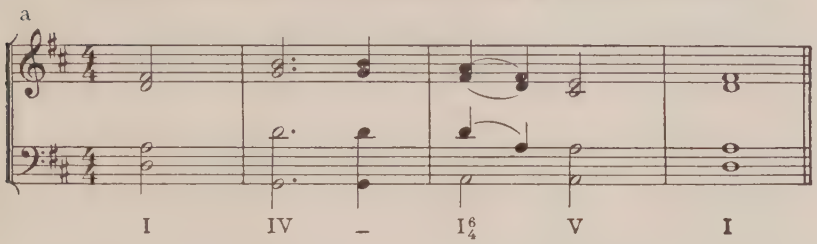
VIII. Harmonic Analysis. [1–*f*] *Discover and mark all instances of the* I^6_4 *chord in hymns and other familiar compositions.* "Father, Whate'er of Earthly Bliss," by Lowell Mason, shows the I^6_4 chord in both the final and the half cadences. (See Figure 74.)

IX. Free Composition. [1–*g*] *An assignment of at least one composition should be made during the study of this chapter.*

STEP TWO. *The* I^6_4 *Chord in a Four-Chord Cadence*

I. Introductory Statement. By the addition of the subdominant triad before the I^6_4 chord of the cadence (thereby making the progression I–IV–I^6_4–V–I), a marked increase in strength and in the feeling of finality will be apparent. Two examples are shown in Figure 74.

Father, Whate'er of Earthly Bliss. Lowell Mason

a

Overture to "The Barber of Seville." Rossini

b Allegro vivace

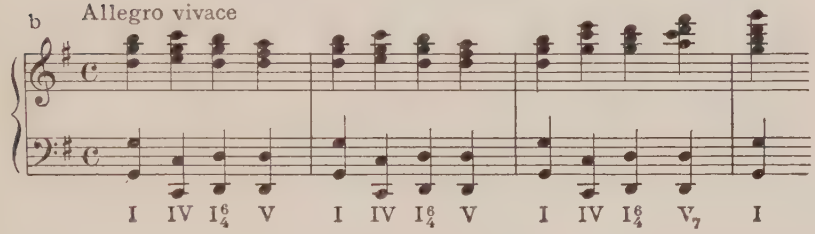
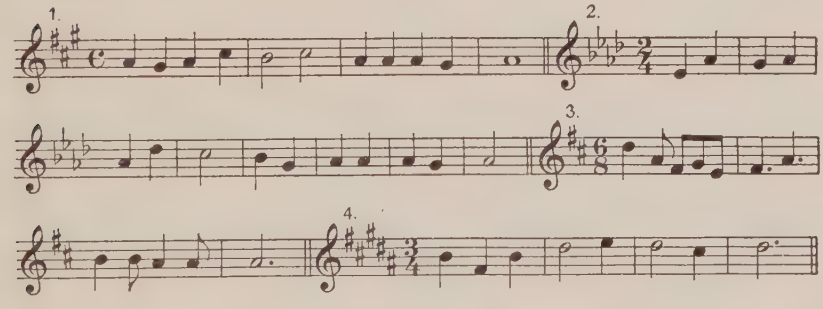



FIGURE 74

II. Chord Building. No assignment.

III. Harmonizing Melodies. [2–*a*] *Harmonize the melodies of Exercise 46, using the* I^6_4 *chord.*

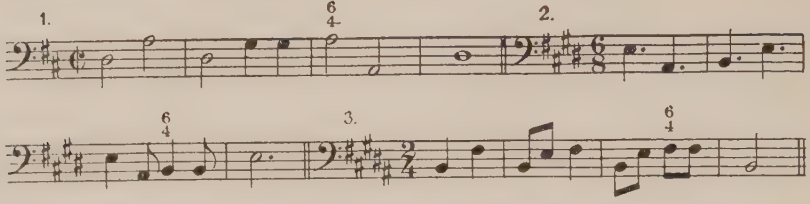
EXERCISE 46.



IV. Melodic Invention. [2–*b*] *Invent melodies which will illustrate the four-chord cadence,* $I–IV–I\,^6_4–V–I$, *through the use of the following three melodic patterns at the close of phrases: 8–8–8–7–8; 3–4–3–2–3; and 5–6–5–5–5.*

V. Harmonizing Basses. [2–*c*] *Harmonize the basses of Exercise 47 in accordance with previous procedure.*

EXERCISE 47.



VI. Keyboard Harmony. [2–*d*] *Play the four-chord cadence, I–IV–I$^6_4$–V–I in all major keys, beginning with 8, 5, and 3 in turn in the soprano.* All written work of this chapter should be practiced at the keyboard.

VII. Ear Training. [2–*e*] *The exercises of this chapter are to be used as material for dictation according to previous directions.*

(1) *Written Dictation.*

(2) *Keyboard Dictation.*

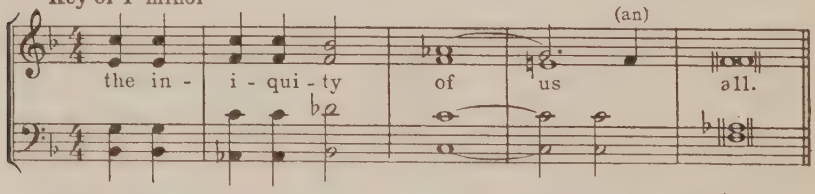
VIII. Harmony Analysis. [2–*f*] *Continue finding and marking instances of the I$^6_4$ chord, and also note examples of the four-chord cadence studied in this step should any occur.*

STEP THREE. *The i$^6_4$ Chord in Cadences in Minor*

I. Introductory Statement. The effect of the i$^6_4$ chord in cadences in minor keys is the same as in major keys, and therefore its use will be the same. The same experiments that were suggested under Step One of this chapter should be repeated here in minor keys, to demonstrate the effect of strength and the feeling of finality that this chord gives to the cadence. (See Figure 75.)

Closing chords of "All We, Like Sheep," from "The Messiah." Handel

a **Key of F minor**



Third Movement, "Moonlight" Sonata. Beethoven

b

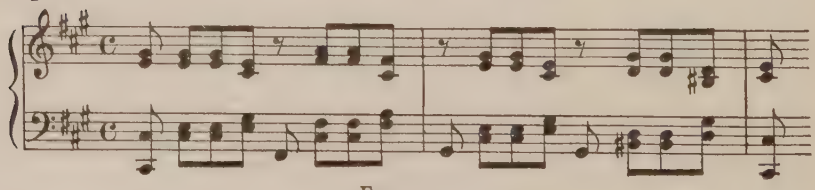
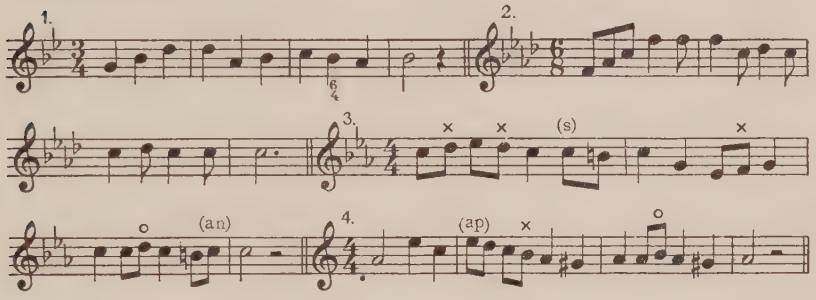


FIGURE 75

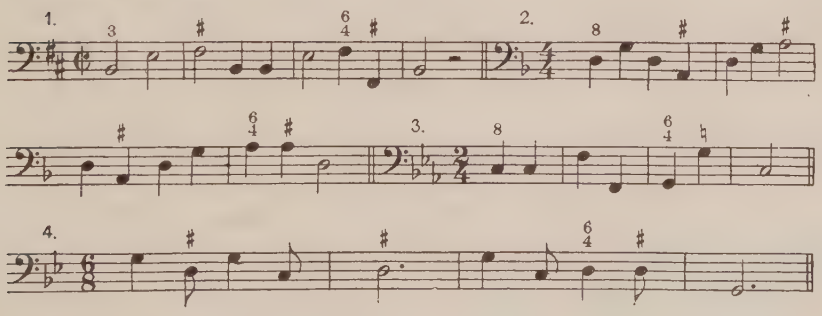
II. Chord Building. [3–*a*] *Write and play the tonic triad in the second inversion (the* i^6_4 *chord) in all minor keys.* Vary the chord arrangement so that each of the three tones of the triad may appear in turn as melody tone, and also so that both close and open position will be used. In the second inversion of the tonic triad, 5 of the scale appears both as bass tone and also in one of the other voices, as in the major keys.

III. Harmonizing Melodies. [3–*b*] *Harmonize the melodies of Exercise 48, using the* i^6_4 *chord.*

EXERCISE 48.

IV. Melodic Invention. [3–*c*] *The work of this assignment requires melodies which involve the four-chord cadence in minor,* i–iv–i^6_4–V–i, *through the use, at the close of phrases, of the following melodic patterns: 8–8–8–7–8; 3–4–3–2–3; and 5–6–5–5–5.*

V. Harmonizing Basses. [3–*d*] *Harmonize the basses of Exercise 49 in accordance with previous procedure.*

EXERCISE 49.



VI. Keyboard Harmony. [3–*e*] *Play the four-chord cadence,* i–iv–i^6_4–V–i *in all minor keys, beginning with 8, 5, and 3 in the soprano.* All written work of this chapter should be practiced at the keyboard.

VII. **Ear Training.** [3-5] *The exercises of this chapter are to be used as material for dictation according to previous directions.*

(1) *Written Dictation.*

(2) *Keyboard Dictation.*

VIII. **Harmonic Analysis.** [3-5] *Find and mark examples of the* i^6_4 *chord in minor keys.* Note also examples of the four-chord cadence studied in this step should any occur. The hymn tune known as "Integer Vitae," or "Flemming," will be an interesting selection to analyze, as it gives examples of the tonic six-four chord in both major and minor, and also of the use of this chord in the half cadence.

Finale, Fifth Symphony. Beethoven

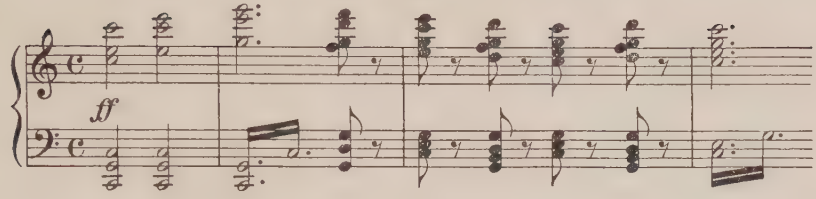



FIGURE 76

CHAPTER ELEVEN

THE DOMINANT SEVENTH CHORD

Up to this point in our work all the chords studied have been triads, or three-tone chords. When four-part harmony was used it was necessary to double one of the tones of the triad in order to provide for all the voices. We are now to study a chord which in its complete form contains four tones. At first our exercises will present the chord with no tones doubled or omitted.

Italian Hymn. Giardini

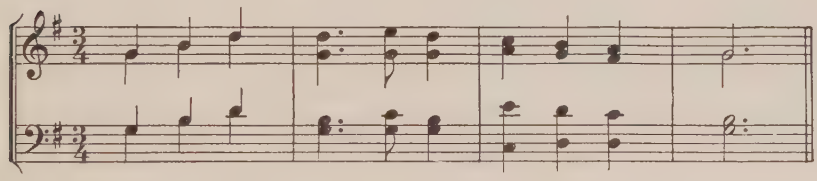



FIGURE 77

In Figure 77 the new chord appears as the next to last chord in the quotation. The root of the chord is the dominant tone of the key, in this quotation, *d*. By reducing the chord to thirds, as in Figure 78 *a*, you will observe that the chord consists of the dominant triad with the addition of the scale tone a third above the fifth of the triad. This additional tone lies a seventh above the root of the chord, and gives the chord its general classification, *i.e.*, a *seventh chord*. Because this seventh chord is built upon the dominant of the scale, it is known as the *dominant seventh chord*. To build the dominant seventh chord in any key, add the scale tone a third above the dominant triad of that key. To reduce a dominant seventh chord to its

simplest form, arrange the tones so that, with the dominant as lowest, the other tones will form a series of thirds above it.

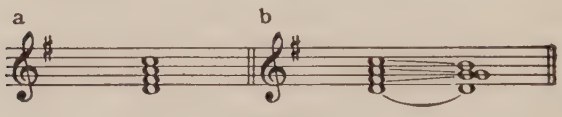


FIGURE 78

The dominant seventh chord is an active chord, strongly demanding a resolution. Included in the chord are 7 of the scale, demanding a resolution to 8, and 4 of the scale, demanding a resolution to 3. Another tone of the chord is 2 of the scale, the usual progression of which is to 1. The root of the dominant seventh chord (in this case the bass tone) calls for the tonic, 1, as its following tone.

In minor keys the dominant triad is a major triad, indicated by the large Roman numeral, V. In marking basses a sharp is placed above or below the bass note, thereby indicating that the chord includes a major third above the root. In minor keys with more than two flats in the signature the major third is indicated by a natural. The same procedure will be followed with the dominant seventh chord, which will be indicated thus: V_7. Basses in minor keys will therefore be marked thus: $\overset{\sharp}{7}$ or $\overset{\natural}{7}$, above or below the root of the chord appearing as bass note.

STEP ONE. *The Dominant Seventh Chord in the Cadence, I–V_7–I*

Minuet in G major. Paderewski

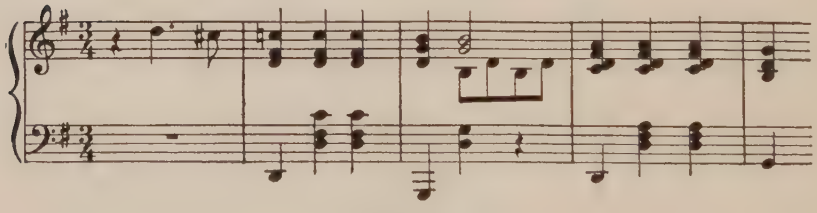


FIGURE 79

Sonata in G major, Op. 49, No. 2, Second Movement. Beethoven

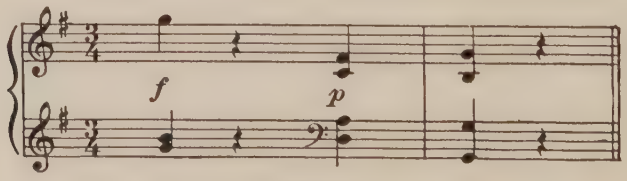


FIGURE 80

I. Introductory Statement. The cadential effect of the dominant seventh chord is clearly shown by the harmonization of certain melodic patterns, a process similar to that followed in the earlier chapters of this course. The bass will take the roots of the chords, tonic, dominant seventh, tonic, indicated by the Roman numerals I–V_7–I. The melodic patterns for the three upper parts will be: 3–2–1; 5–4–3; and 8–7–8. (See Figure 81.)

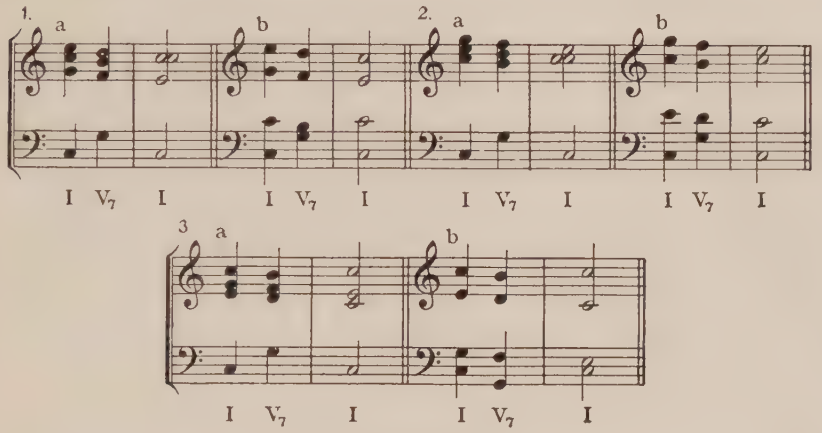
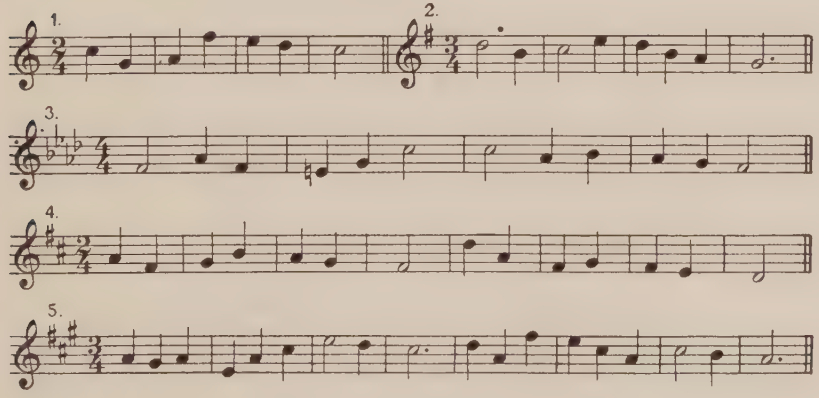



FIGURE 81

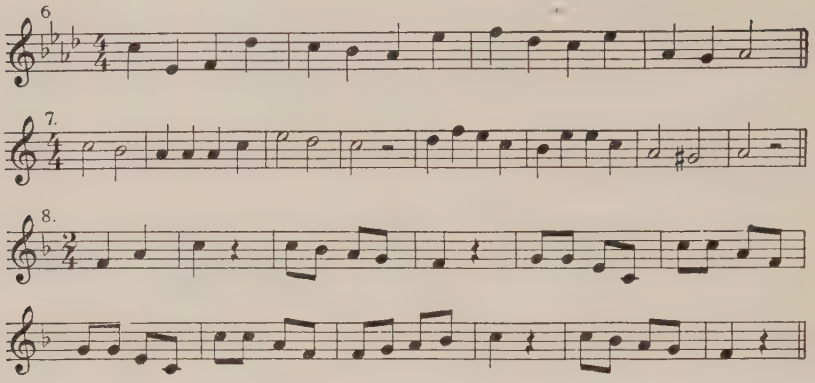
II. Chord Building. [1–*a*] *Write and play the dominant seventh chord in all major and minor keys. Write and play the cadence, I–V_7–I, in all major and minor keys, using in turn the three melodic patterns, 3–2–1; 5–4–3; and 8–7–8, in close and open harmony as shown in Figure* 81.

III. Harmonizing Melodies. [1–*b*] *Harmonize the melodies of Exercise 50, using the progression, I–V_7–I.* No. 8 should be provided with a piano accompaniment.

EXERCISE 50.



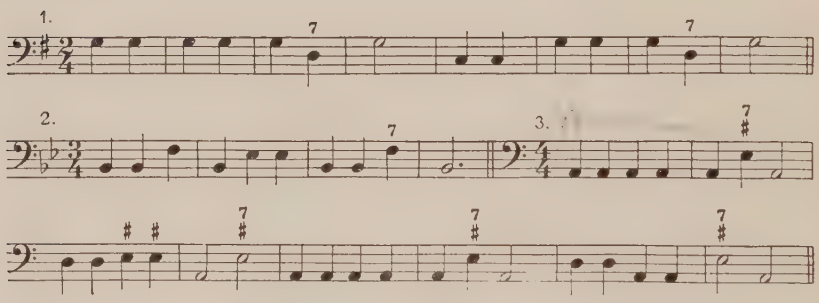
EXERCISE 50, *continued*



IV. Melodic Invention. [1–*c*] *Invent melodies in major and minor keys, using the melodic patterns, 3–2–1; 5–4–3; and 8–7–8, harmonized by the progression, I–V_7–I.*

V. Harmonizing Basses. [1–*d*] *Harmonize the basses of Exercise 51.*

EXERCISE 51.



VI. Keyboard Harmony. [1–*e*] *Play the melodic patterns, 3–2–1; 5–4–3; and 8–7–8 harmonized with I–V_7–I, in all major and minor keys.* All the material of this chapter should be practiced at the keyboard.

VII. Ear Training. [1–*f*] *The exercises of this step and the material of Figure 81 (in all major and minor keys) are to be used as material for dictation, according to previous directions.*

(1) *Written Dictation.*
(2) *Keyboard Dictation.*

VIII. Harmonic Analysis. [1–*g*] *Find and mark with V_7 instances of the dominant seventh chord in hymns and piano compositions.* The chord will appear in many ways beside that explained in this step. Simply indicate

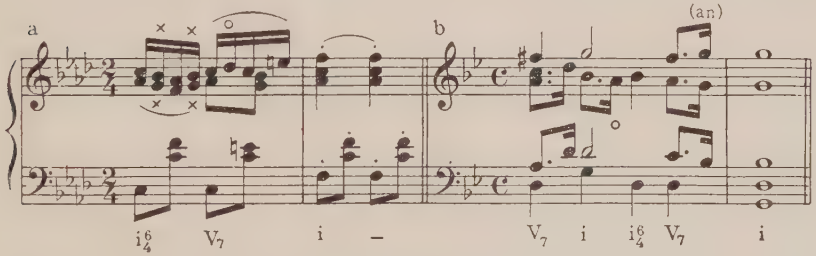
the chord by the symbol V_7 wherever you discover it. (See Figures 8 and 55.) Look through your own compositions to see whether you have used it instinctively.

IX. Free Composition. [1–*h*] *An assignment of at least one composition should be made during the study of this chapter.* Use the dominant seventh chord freely, but observe that its effect in the final cadence will be weakened if you overwork it elsewhere in the phrase.

STEP TWO. *Cadences where V_7 follows I^6_4*

I. Introductory Statement. Probably the most frequent use of the dominant seventh chord in cadences occurs where it follows the I^6_4 chord. This progression may appear in the three-chord cadence, $I–I^6_4–V_7–I$ or in the four-chord cadence, $I–IV–I^6_4–V_7–I$. Here we are considering the cadence as beginning with the active chord (I^6_4 or IV). The inactive I is not to be considered as a part of the cadence, but merely as introducing the progression. We shall later study other four-chord cadences in which various chords precede the I^6_4 (See Figures 77 and 82).

Moment Musical. Schubert

"Behold! The Lamb of God" from "The Messiah." Handel

In Old Madrid. Trotere

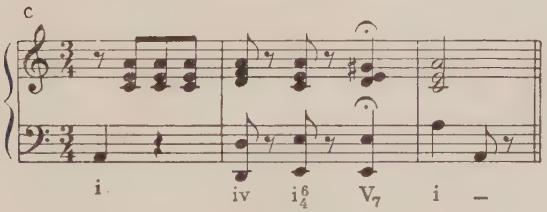



FIGURE 82

II. Chord Building. [2–*a*] *Write and play the three-chord cadence, $I–I^6_4–V_7–I$, in all major and minor keys, using the melodic patterns, 1–3–2–1; 3–5–4–3; and 8–8–7–8. Employ both close and open harmony.*

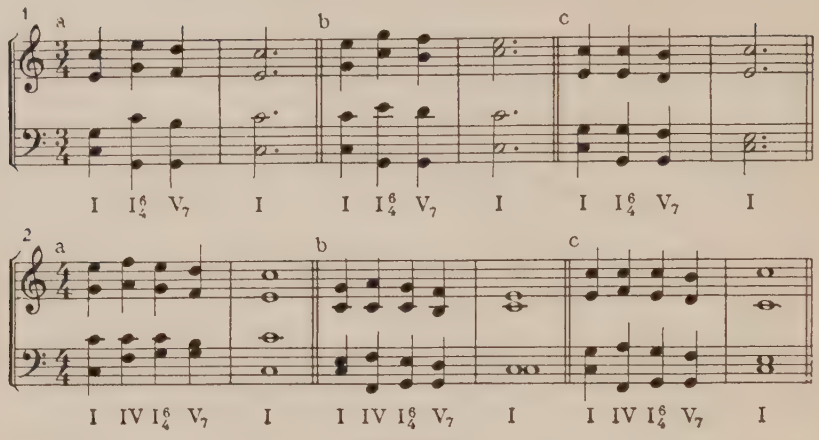
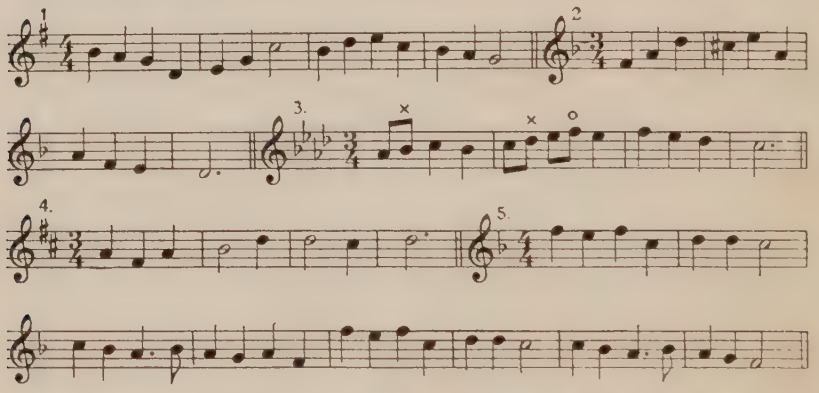


FIGURE 83

III. Harmonizing Melodies. [2–*b*] *Harmonize the melodies of Exercise 52 for voices, using the progression* $I\frac{6}{4}$–V_7.

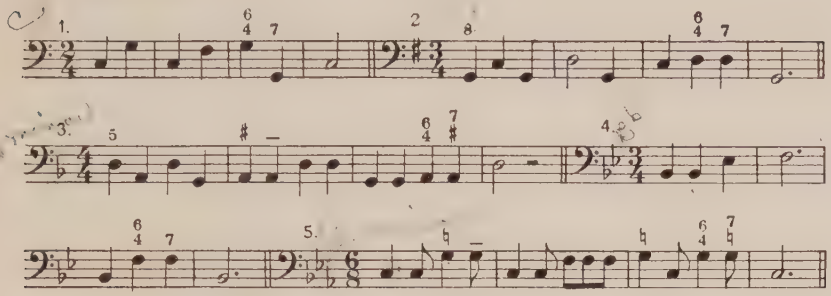
EXERCISE 52.



IV. Melodic Invention. [2–*c*] *Invent melodies in which the three-chord cadence appears,* I–$I\frac{6}{4}$–V_7–I, *using the melodic patterns, 1–3–2–1; 3–5–4–3; and 8–8–7–8.* Variety may be secured by using interchangeably the tones of the tonic triad as first tones of these melodic patterns. Use both major and minor keys. *Invent melodies in which the four-chord cadence appears,* I–IV–$I\frac{6}{4}$–V_7–I, *using the melodic patterns, 3–4–3–2–1; 5–6–5–4–3; and 8–8–8–7–8, in major and minor keys.*

V. Harmonizing Basses. [2–*d*] *Harmonize the basses of Exercise 53 for four voices.* Observe that when the second inversion of the tonic triad is desired, the figures $\frac{6}{4}$ are written above or below the bass note, 5 of the scale.

EXERCISE 53.



VI. Keyboard Harmony. [2–e] *The melodic patterns and chord progressions of Figure 83 are to be played in all major and minor keys.*

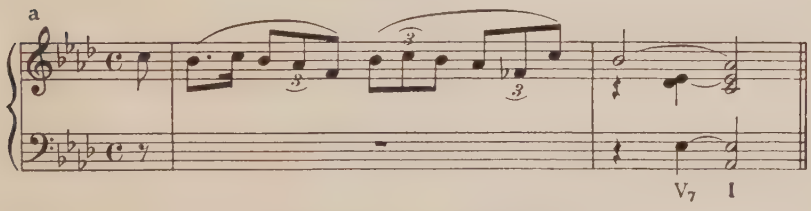
VII. Ear Training. [2–f] *The exercises of this step and the material of Figure 83, in all major and minor keys, are to be used for written and keyboard dictation, according to previous directions.*

VIII. Harmonic Analysis. [2–g] *Discover and mark examples of three- and four-chord cadential patterns of the type of this step, as found in hymn tunes and standard piano literature.*

STEP THREE. *Using the Common Tone in the Progression V_7–I*

I. Introductory Statement. In Steps One and Two of this chapter no mention was made of the fact that there is a tone common to both the tonic

Narcissus. Nevin



Simple Aveu. Thomas

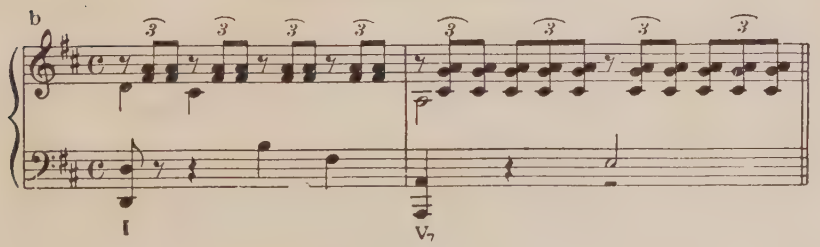



FIGURE 84

and dominant seventh chords, namely, 5 of the scale. Very frequently in the progression from V_7 to I this tone continues in one of the upper voices as a common tone. When this occurs the dominant tone necessarily will be doubled, because it will appear in the bass and also in one of the upper voices. This voice leading will necessitate the omission of one of the tones of the dominant seventh chord. As the seventh of the chord gives the chord its character as a seventh chord, that tone, of course, cannot be dispensed with. Consequently either the fifth or the third of the chord will be omitted. (See Figure 84.)

The composer may use his discretion in deciding how he wishes his dominant seventh chord to appear, although the importance of the leading tone, 7 of the scale, must be taken into account in making his decision. When the common tone is employed in the progression V_7–I, two new melodic patterns are practicable, 1–2–1, and 3–4–3 with this new harmonization. (See Figure 85.)

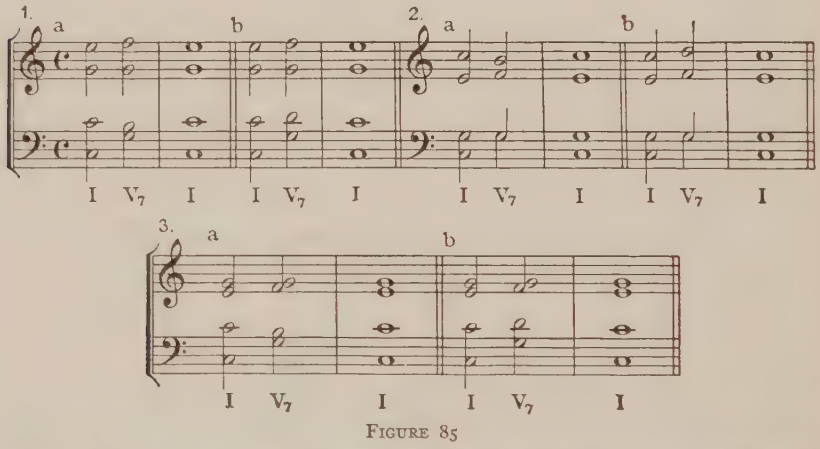
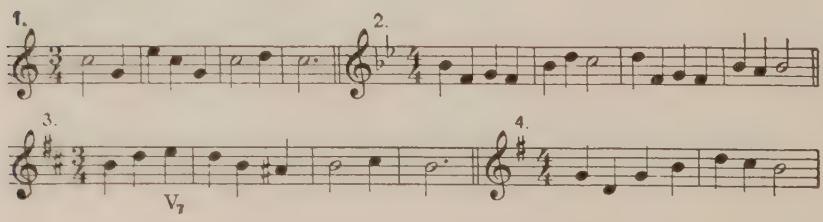



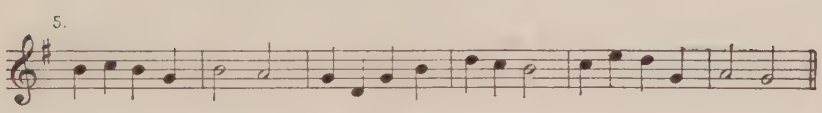
FIGURE 85

II. Chord Building. [3–*a*] *Write and play the material of Figure 85 in all major and minor keys.*

III. Harmonizing Melodies. [3–*b*] *Harmonize the melodies of Exercise 54, using the common tone in the progression from V_7 to I.*

EXERCISE 54.





IV. Melodic Invention. [3–*c*] *Invent melodies in major and minor keys, using the various melodic patterns shown in Figure 85.*

V. Harmonizing Basses. [3–*d*] *The basses of Exercises 6, 8, 10, and 12 are to be harmonized, using the dominant seventh chord in the cadence and maintaining the common tone in the progression from V_7 to I.*

VI. Keyboard Harmony. [3–*e*] *Play the progression $I–V_7–I$ in all major and minor keys, maintaining the common tone between V_7 and I, and employing the melodic patterns, 3–4–3, 1–2–1, 8–7–8, and 5–5–5.* (See Figure 86 *a* and *b*.)

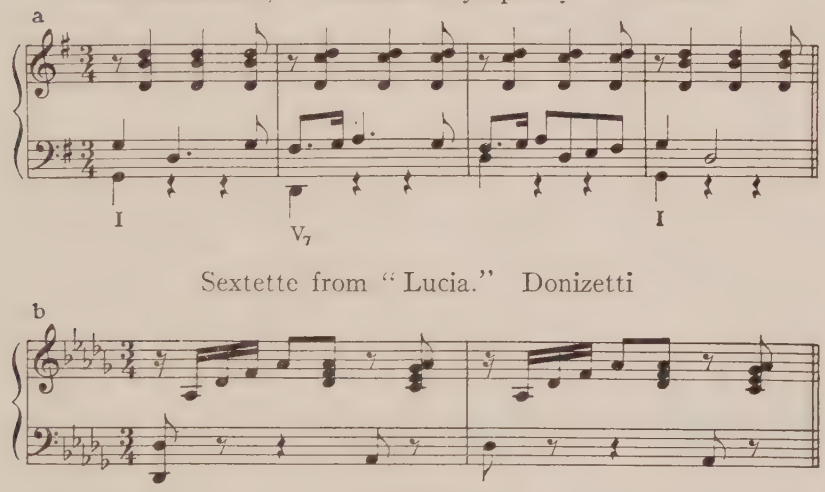



FIGURE 86

VII. Ear Training. [3–*f*] *Written and keyboard dictation in all major and minor keys is to be given with the material of Figure 85.*

VIII. Harmonic Analysis. [3–*g*] *Continue finding and marking of V_7 chords.* There is no new principle in this assignment, though you may now be able to find dominant seventh chords which previously eluded your discovery because of omitted tones. See the second measure of Mendelssohn's Song without Words, "Consolation."

STEP FOUR. *The Progression, $IV–V_7–I$*

I. Introductory Statement. The progression of the subdominant to the dominant seventh chord is quite common, although its character is somewhat commonplace. As a rule composers prefer a more musically

interesting harmonization of melodic patterns adaptable to this progression, (see Chapter XVI) but because it occurs from time to time in good music, we should be familiar with it. (See Figure 87.)

Onward, Christian Soldiers. Sullivan Largo. Handel

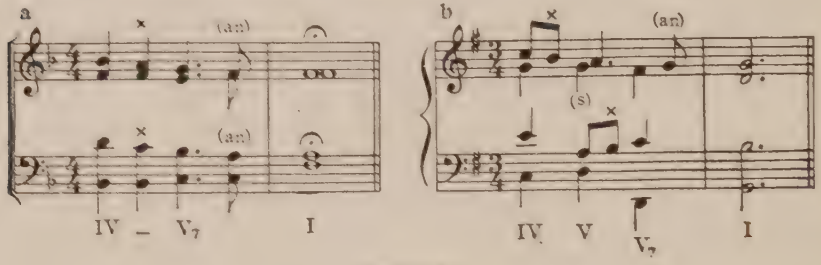



FIGURE 87

Figure 88 illustrates a few of the more usual ways in which the progression from IV to V_7 is found. It will be interesting to observe that both examples of Figure 87 are variants of Figure 88 *d*.

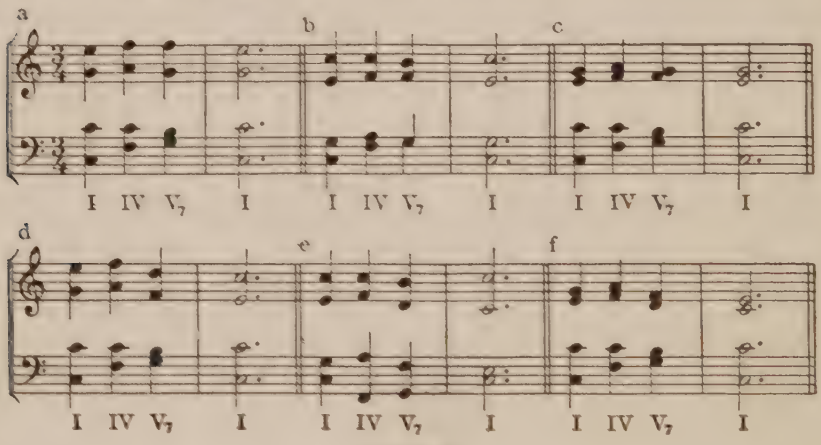
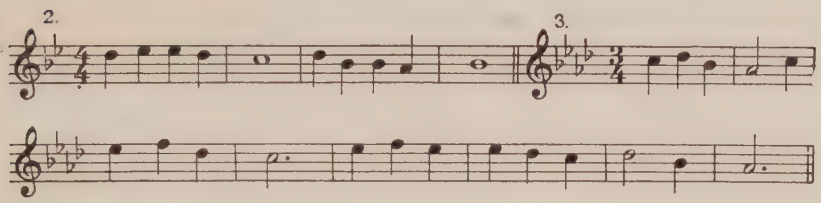



FIGURE 88

II. **Chord Building.** [4–*a*] *Write and play the material of Figure 88 in all major and minor keys.*

III. **Harmonizing Melodies.** [4–*b*] *Harmonize the melodies of Exercise 55, using the progression IV–V_7–I.*

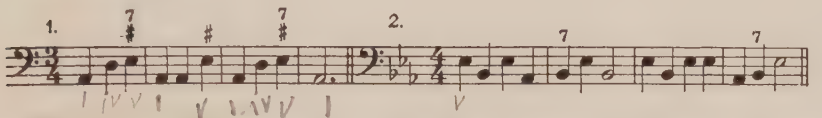
EXERCISE 55.



IV. Melodic Invention. [4–*c*] *Invent melodies in major and minor keys, using the various melodic patterns shown in Figure 88.*

V. Harmonizing Basses. [4–*d*] *Harmonize the basses of Exercise 56.*

EXERCISE 56.



VI. Keyboard Harmony. [4–*e*] *Play the material of Figure 88 in all major and minor keys.*

VII. Ear Training. [4–*f*] *Use the material of this step as dictation in all major and minor keys.*

VIII. Harmonic Analysis. [4–*g*] *Continue discovering and marking of V_7 chords, with increasing attention to their use in various progressions.*

Marche Militaire. Schubert

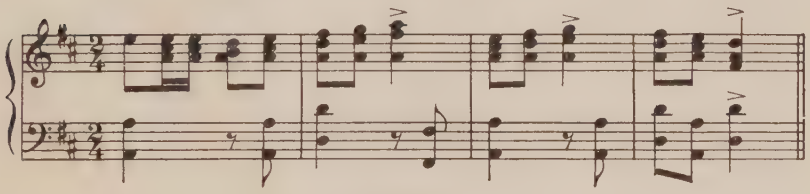



FIGURE 89

STEP FIVE. *Two Important Exceptions to the Rules for Voice Leading*

I. Introductory Statement. The topic treated in this step does not really belong to the subject, Dominant Seventh Chord. It is introduced at this point because frequent occasion will be found in subsequent lessons to employ the voice leadings here discussed.

Two rules for voice leading have been given: first, wherever a common tone occurs in two adjacent chords, the common tone should be given to the same part in both chords; second, when no common tone occurs, the upper voices are led in contrary motion to the bass. Stress has been given to the direction in which each active tone of the scale naturally progresses.

II. First Exception. The melodic patterns 1–2–3 and 3–2–1 occur occasionally with the harmonization I–V–I. This necessitates the violation of the common tone principle. The customary voice leading is shown in Figure 90. (See also Figures 19, 20, and 89.)

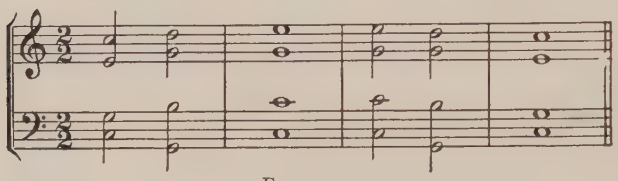


FIGURE 90

When the common tone principle is set aside, the contrary motion principle may be used to good advantage.

III. Second Exception. Stress has been given to the insistence of the leading tone in demanding a resolution to the tonic. In Figure 90 this demand is violated, and the leading tone is carried downward to the dominant, thus presenting a complete tonic chord. This progression can occur best in an inner voice, although, for a particular effect, Wagner employed it in the upper voice in the third act of Parsifal. (See Figure 91.) It is customary, also, when the leading tone is thus carried downward, to lead the bass upward from 5 to 1, although modern writers are not insistent upon this point.

At the anointing of Parsifal, Act III, Parsifal. Wagner

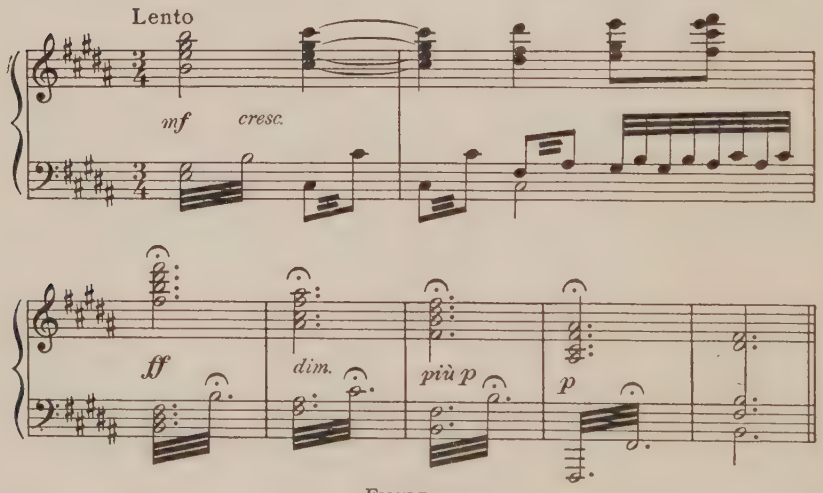


FIGURE 91

In Figure 90 the voice leading is illustrated by the progression, V–I, but it occurs most frequently in the progression V_7–I. (See Figures 20, 57, 87 *b*, 142 *a* and *b*, 143 *a* and *b*.)

Minute Waltz. Chopin

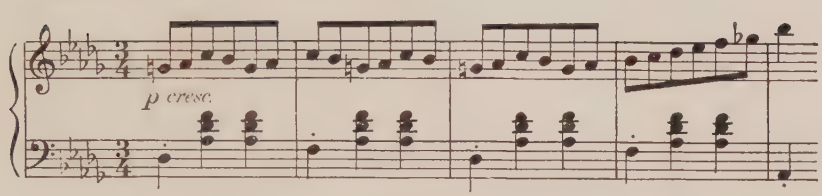



FIGURE 92

CHAPTER TWELVE

INVERSIONS OF THE TONIC TRIAD

In previous chapters you have been constantly urged to exercise your best judgment and taste in making the soprano part as melodious as the material at your disposal permits. In artistic music, attention is also given to the melodic flow of the other parts. The bass part especially should be carefully written with respect to rhythmic vitality, smoothness, and melodious progression. There are two ways in which this may be done: first, by occasionally assigning to the bass part tones other than the roots of the chords used, a process which is called *inversion*, and second, by employing non-harmonic tones to make a more melodiously flowing bass part.

In Chapter Ten the I_4^6 chord was used to strengthen the characteristic movement of the bass in cadences. Chapters Twelve, Thirteen, and Fourteen will develop the study of chord inversions in general, and in Chapter Fifteen the melodic quality of the bass will be further increased by the employment of non-harmonic tones.

STEP ONE. *The First Inversion*

I. Introductory Statement.

Figure 93 *a* gives the first phrase of a familiar hymn known as "Webb" from the name of its composer, G. J. Webb. The tonic triad occurs eight times in this quotation. If the phrase were harmonized according to the plan of the earlier chapters with only the roots of triads as the bass tones, the result would be as in Figure 93 *b*. By playing the two examples and comparing the effects you will find that (*a*) is much smoother and far more satisfying than (*b*). This pleasing result is due mainly to the melodi-

Hymn Tune, "Webb"

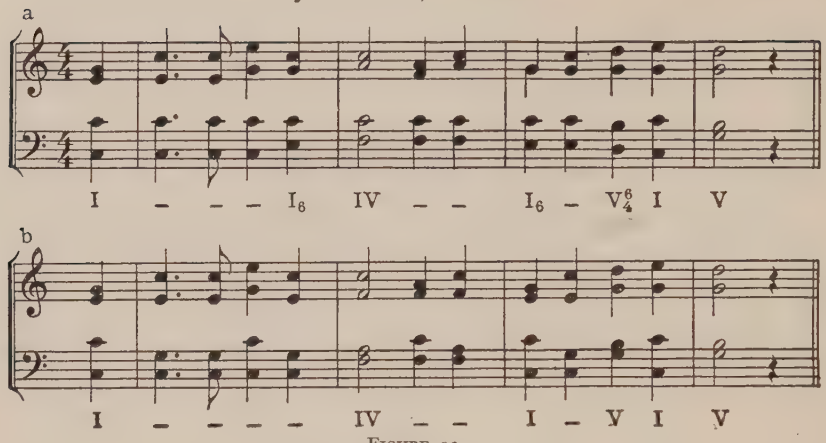


FIGURE 93

ous character of the bass. Observe how the composer has used the third of the tonic triad in the bass of the fifth chord, thereby relieving the abruptness of the skip of the bass from 1 to 4, and giving the suggestion of melody to the bass part. Again, in the bass of the third full measure, the use of inversions is even more pleasing in the downward diatonic scale progression. The effectiveness of this procedure will be most apparent by comparing Figure 93 *a* and *b*, with the inner voices omitted, playing the soprano and bass parts only.

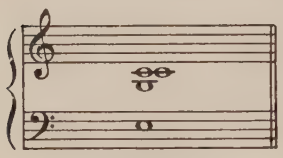
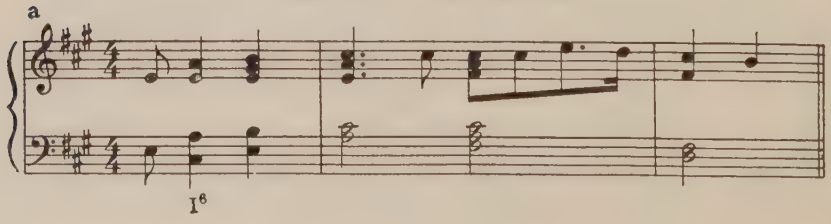


FIGURE 94

A triad is said to be in the *first inversion* when the third of the chord appears in the bass. Reduced to its closest arrangement, it will be seen that the intervals of the chord assume the relationship of a sixth and a third above the lowest (bass) tone. (See Figure 94.) The tonic triad in its first inversion is called the I^6_3 chord; or, more commonly, the designation is abbreviated to I_6, the essential 3 being taken for granted. By employing tones other than the root in the bass, the tonic triad is changed from its character of repose into one of expectancy.

Confidence. Mendelssohn



Minuet from G minor Symphony. Mozart

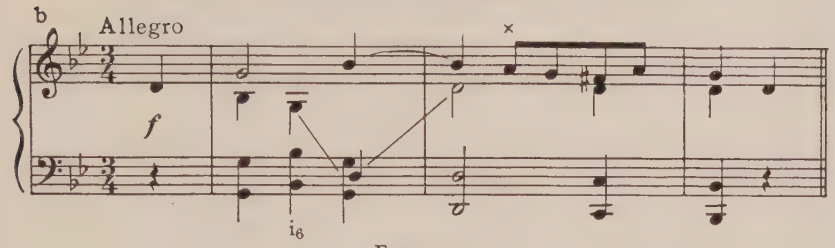



FIGURE 95

II. Chord Building. [1–*a*] The third of the tonic triad, being the sensitive tone which determines the major or minor character of the chord, should seldom appear in more than one voice at the same time in good part-writing. In the first inversion of the tonic triad, where the third of the chord is in the bass, care should be taken to avoid doubling or repeating this tone in an upper voice. (Such doubling is sometimes effective, however, under certain conditions to be described in Step Two.)

Figure 96 *a*, *b*, *c*, *d*, *e*, *f*, *g*, and *h* show some of the possible adjustments of the I_6 chord, in the key of C major. You will observe that in no instance is the third of the chord doubled. (See also Figure 95.)

(1) **Writing Triads.**

Write the first inversion of the tonic triad in all major and minor keys, in as many voice arrangements as practicable, bearing in mind the foregoing instructions.

(2) **Playing Triads.**

Use the same material for keyboard experience, working without notation at least part of the time.

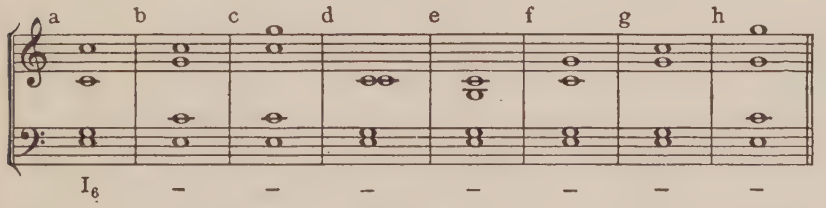
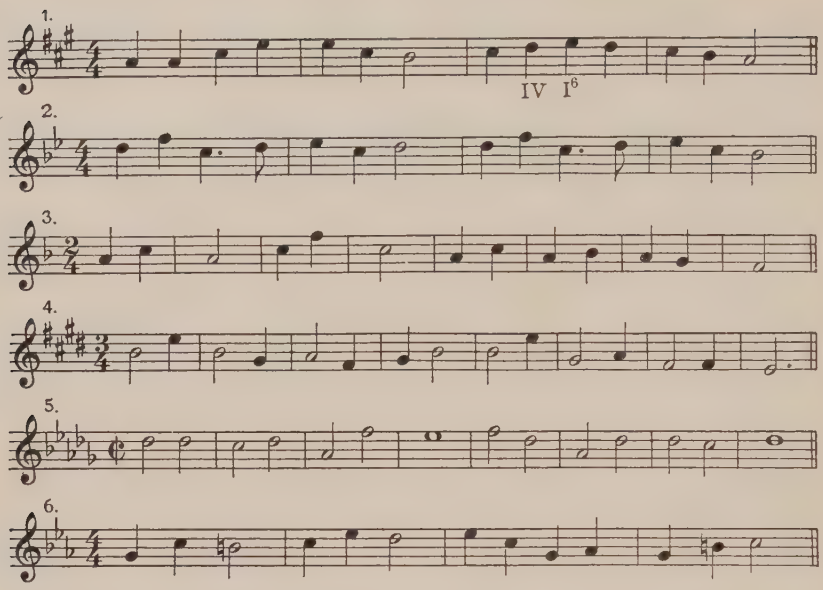



FIGURE 96

III. Harmonizing Melodies. [1–*b*] *Harmonize the melodies of Exercise 57.* Many of the melodies in the earlier exercises of the outline also are appropriate for use at this point. Harmonizations should be in both written and keyboard work. Not more than one or two examples of the I_6 inversion need appear in any one exercise.

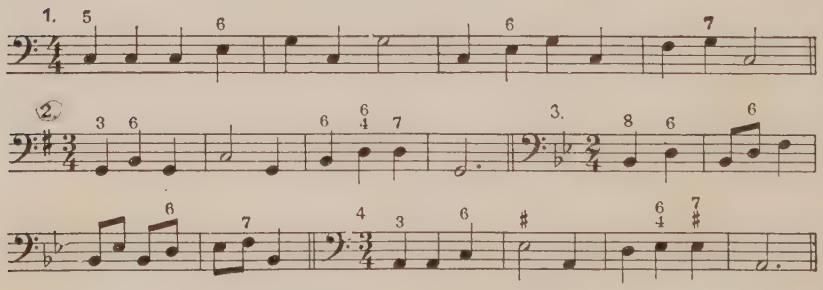
EXERCISE 57.



IV. Melodic Invention. [1–*c*] *Write melodies which may be harmonized appropriately with the use of the I_6 chord.*

V. Harmonizing Basses. [1–*d*] *Harmonize the basses of Exercise 58.* Observe the marking of the last chord but one in No. 4. The 7 indicates that a seventh chord is to be used, and, as explained on page 45, the # means that the third of the chord is to be sharped, thus making the dominant seventh chord of the harmonic minor scale.

EXERCISE 58.



VI. Keyboard Harmony. [1–*e*] *In addition to playing all the exercises of the chapter, play the first inversion of the tonic triad in all major and minor keys, with both 1 and 5 in the soprano in turn.*

VII. Ear Training. [1–*f*] *Individual chords played after announcement of the key, brief chord progressions, and harmonized melodies, in which the* I_6 *chord occurs, should be used for both written and keyboard dictation.*

VIII. Harmonic Analysis. [1–*g*] *Mark with* I_6 *instances of first inversions of the tonic triad found in assigned hymns and simple piano compositions.* (See Figure 70 and numerous other examples.)

IX. Free Composition. [1–*h*] An assignment in free composition should be made during the study of this chapter.

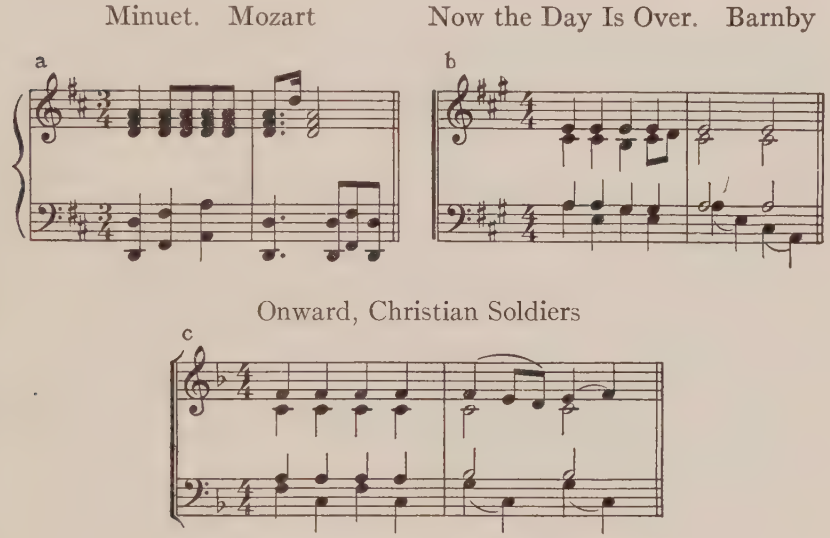


FIGURE 97

STEP TWO. *Inversions of Repetitions of the Same Chord*

I. Introductory Statement. Figure 97 *a*, gives the opening measures of Mozart's celebrated Minuet from the opera, "Don Juan." This quotation illustrates the freedom with which inversions of the tonic chord may be used when the upper voices repeat or sustain the same tones. Under these conditions the third of the I_6 chord may be doubled, and the I_4^6 chord may appear elsewhere in the phrase than at the cadence. See the opening measures of Figure 97 *b*, "Now the Day Is Over"; the quotation from "Onward, Christian Soldiers," Figure 97 *c*; the hymn tune, "Park Street," arranged from Venua. (See also Figures 51 and 64.)

Similar freedom in doubling the third of the chord and in the use of I_4^6 may be exercised when dealing with a moving soprano if contrary motion between soprano and bass is employed in repetitions of the same chord. (See Figure 98.)

Scherzo, Midsummer Night's Dream. Mendelssohn

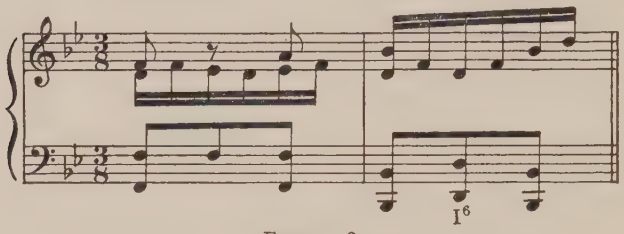


FIGURE 98

The employment of parallel motion in such circumstances should be avoided because it is likely to result in duplicating the progressions of two voices, thereby producing the effect of three instead of four voice parts; *i.e.*, parallel octaves or unisons.

II. Harmonizing Melodies. [2–*a*] *Some of the melodies of earlier exercises may be used for this assignment, as, for example, Exercises 5, 7, 9, 26, etc.* You are expected to present tasteful examples of first and second inversions of the tonic triad, avoiding doublings of the third of the chord except under conditions explained in the introductory statement above. Study the melodies of earlier assignments, including exercises in the minor mode, to discover places where inversions of the tonic chord may be used to advantage. An excellent assignment at this point would be the first four phrases of "Auld Lang Syne," to be harmonized for *four* voices, employing inversions of the tonic triad and non-harmonic tones.

Onward, Christian Soldiers. Sullivan

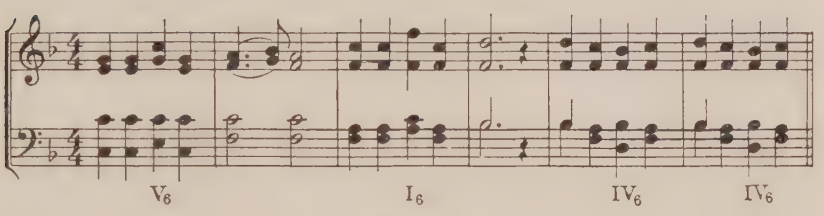



FIGURE 99

CHAPTER THIRTEEN

INVERSIONS OF THE DOMINANT AND SUBDOMINANT TRIADS

The statement was made in Chapter Twelve that inversions of the tonic triad were used to make a more melodious bass part. By the employment of inversions of the dominant and subdominant triads the bass part assumes even greater melodic freedom. The first inversion (third of the chord in the bass) is also indicated here by the Roman numeral of the triad and a small figure 6 (which shows that the root of the triad lies a sixth above the bass note), for example, I_6, V_6, IV_6. As in the case of the tonic triad, the third of a chord in the first inversion (the bass tone) should seldom appear in another voice. The exceptions to this statement which were given for the tonic triad apply equally to the dominant and subdominant triads.

STEP ONE. *First Inversions of V and IV*

I. Introductory Statement. The excerpt from "Onward, Christian Soldiers," Figure 99, provides an excellent example of the first inversions of I, V, and IV.

Experience in using the first inversions of the dominant triad, V_6, will show you that (except in sequences and other emergencies) the bass tone, third of the chord and 7 of the scale (the leading tone and therefore very prominent), is never doubled.

In the first inversion of the subdominant triad, IV_6, you will discover that (*a*) except in repetitions of the subdominant chord, the third of the chord (bass tone) is rarely doubled; (*b*) either the root or the fifth of the

chord may be doubled according to the general voice leading; (*c*) the chord may resolve into I, V, or V_7.

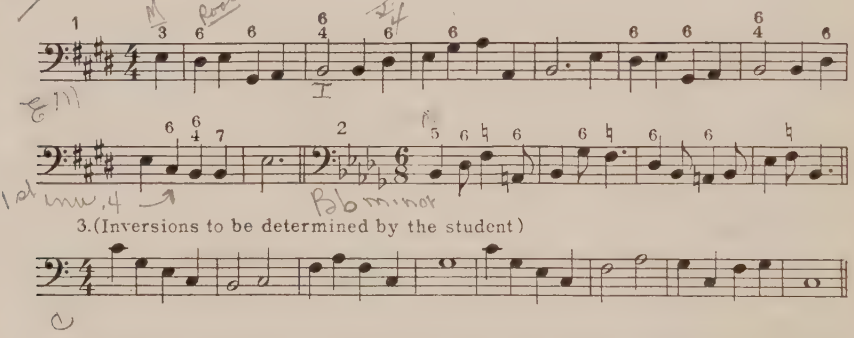
II. Chord Building. [1–*a*] *Write and play the first inversions of the dominant and subdominant triads in all major and minor keys connecting them with a tonic triad.*

III. Harmonizing Melodies. [1–*b*] *Harmonize the melodies of Exercises 11, 19, and 33, using first inversions for smoothness of the bass part.*

IV. Melodic Invention. There is no new assignment under this heading, since the inversion affects the bass part, not the melody.

V. Harmonizing Basses. [1–*c*] *Harmonize the basses of Exercise 59.*

EXERCISE 59.



VI. Keyboard Harmony. Constant keyboard application should be made of every step.

VII. Ear training. [1–*d*] Since the problem of this chapter deals with the melodic treatment of the bass part, the ear training must concentrate not only on the harmonic structure as a whole but also on the bass part as a melody. The studies should first be given in short groups of chords, then with a complete exercise. A beneficial exercise at this time will be the dictation of complete harmony, the pupils responding by reciting or writing the Roman numerals. Wherever the first inversion occurs, it should be indicated by adding the figure 6 to the numeral; the second inversion should be indicated by $\frac{6}{4}$.

VIII. Harmonic Analysis. [1–*e*] *Discover and mark with I_6, V_6, or IV_6, all first inversions in assigned familiar hymns and simple piano compositions.*

IX. Free Composition. [1 *f*] *An assignment in free composition should be given during the study of this chapter.*

Sonata, Op. 49, No. 2. Beethoven

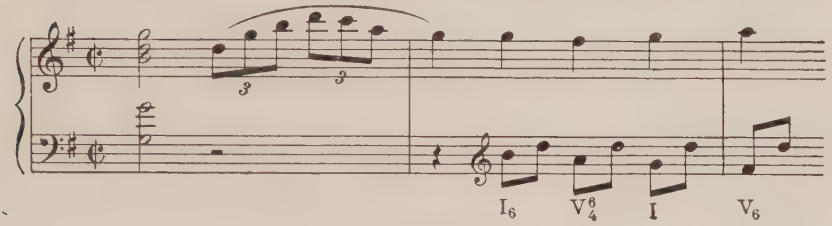



FIGURE 100

STEP TWO. *The Second Inversion of the Dominant Chord*

I. Introductory Statement. A frequent appearance of V^6_4 occurs between the chords I and I_6, thereby making a scalewise melody in the bass, $I–V^6_4–I_6$. (See Figure 100.) The soprano melodic patterns for this progression are 3–2–1, 8–7–8, 5–5–5.

The reverse of this progression is also practicable (though it should not be used in the cadence), and the melodic patterns are 1–2–3, 8–7–8, and 5–5–5, while the bass progression is $I_6–V^6_4–I$. (See Figure 101.) These patterns are most effective in cases where the soprano and bass proceed scalewise in contrary motion, as in Nos. *a* and *d*.

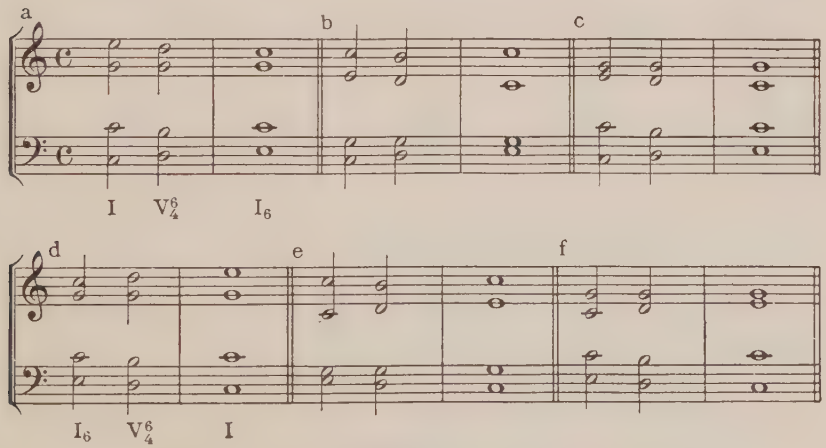
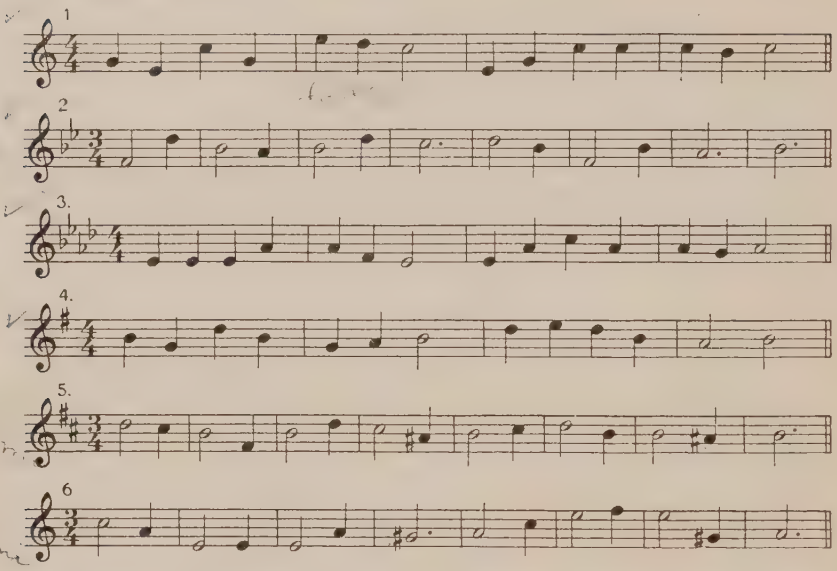


FIGURE 101

II. Chord Building. [2–*a*] *Write and play the second inversion of the dominant triad, V^6_4, in all major and minor keys.*

III. Harmonizing Melodies. [2–*b*] *Harmonize the melodies of Exercise* 60, *using the V^6_4 chord in appropriate places.*

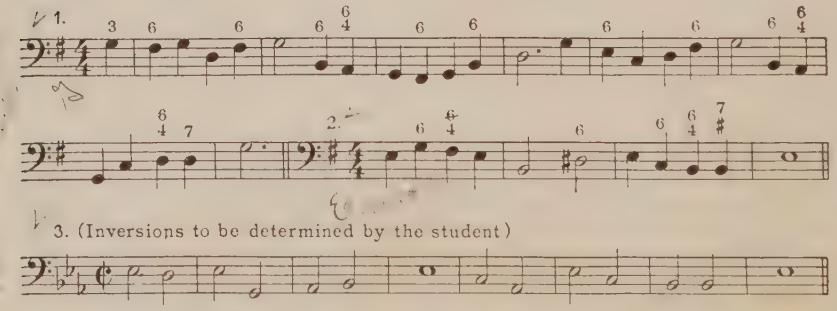
EXERCISE 60.



IV. Melodic Invention. [2–*c*] The melodic patterns 3–2–1, 8–7–8, 5–5–5, 1–2–3, 8–7–8, and 5–5–5 should be employed in melodies invented to use appropriately the V_4^6 chord following or preceding the I_6.

V. Harmonizing Basses. [2–*d*] *Harmonize the basses of Exercise 61.*

EXERCISE 61.



VI. Keyboard Harmony. [2–*e*] *Constant keyboard application should be made of every lesson. Play the chord successions of this step in all major and minor keys.*

VII. Ear Training. [2–*f*] *The material of this step is to be used for written and keyboard dictation.* (See suggestions under Step One, 1–*d*.)

VIII. Harmonic Analysis. [2–*g*] *Discover and mark with V_4^6 all second inversions of the dominant chord in familiar hymns and simple piano compositions.* Examples will be found in "American Hymn," Keller; "America, the

Beautiful," Ward; the third movement of Beethoven's "Moonlight Sonata," etc. (See also Figure 66.)

STEP THREE. *The Second Inversion of the Subdominant Triad*

I. Introductory Statement. The most frequent appearance of IV^6_4 is between two tonic triads. This progression maintains 1 of the scale as a common bass tone for the three chords with each tone of the chord represented in the upper voices in all three chords. (See Figures 77, 102.)

O, Paradise. Barnby — Sweet and Low. Barnby

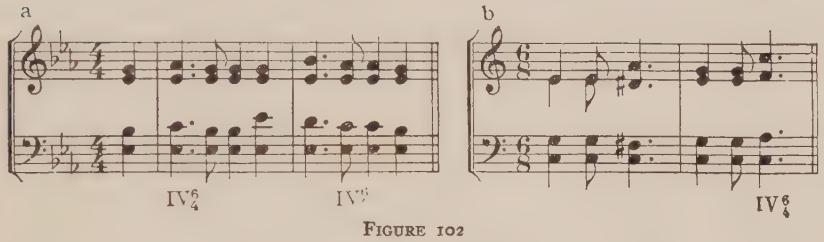


FIGURE 102

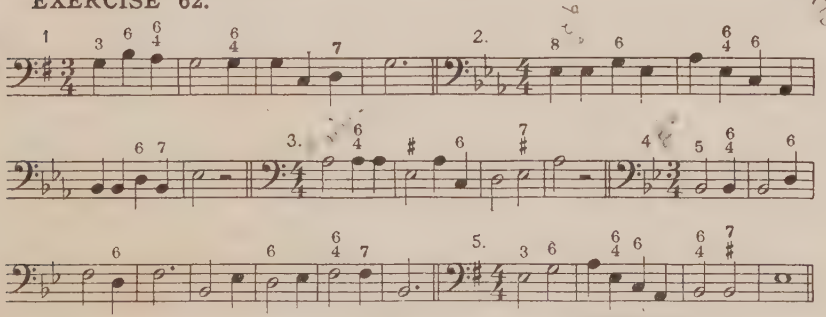
II. Chord Building. [3–*a*] *Write and play the second inversion of the subdominant triad, IV^6_4, in all major and minor keys.*

III. Harmonizing Melodies. [3–*b*] *Reharmonize Exercises 13, 15, 17, and 31, with one or two examples of $I–IV^6_4–I$, in each melody.*

IV. Melodic Invention. [3–*c*] *Using the melodic patterns, 5–6–5, 3–4–3, and 8–8–8, invent melodies in major and minor keys which may appropriately be harmonized by the use of the IV^6_4 chord.*

V. Harmonizing Basses. [3–*d*] *Harmonize the basses of Exercise 62.*

EXERCISE 62.



VI. Keyboard Harmony. [3–*e*] *Play the succession, $I–IV^6_4–I$, with three soprano positions, in all major and minor keys.*

VII. Ear Training. [3–*f*] *The material of this step is to be used for written and keyboard dictation.*

VIII. Harmonic Analysis. [3–g] *Discover and mark with* IV^{6}_{4} *all second inversions of the subdominant chord in familiar hymns and simple piano compositions.* Examples will be found in the "Cavatina," Raff; "The Lost Chord," Sullivan; The Bridal Chorus, from "Lohengrin," Wagner; etc. (See also Figures 8 and 73.)

Rondo Capriccioso. Mendelssohn

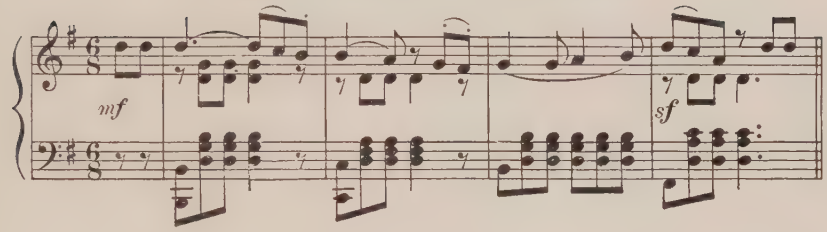



FIGURE 103

CHAPTER FOURTEEN

INVERSIONS OF THE DOMINANT SEVENTH CHORD

I. **Introductory Statement.** An analysis of the quotation from the hymn tune, "Truro," by Burney, will reveal the fact that the dominant seventh chord may appear with any one of its tones in the bass. (See Figure 104.)

Truro. Burney

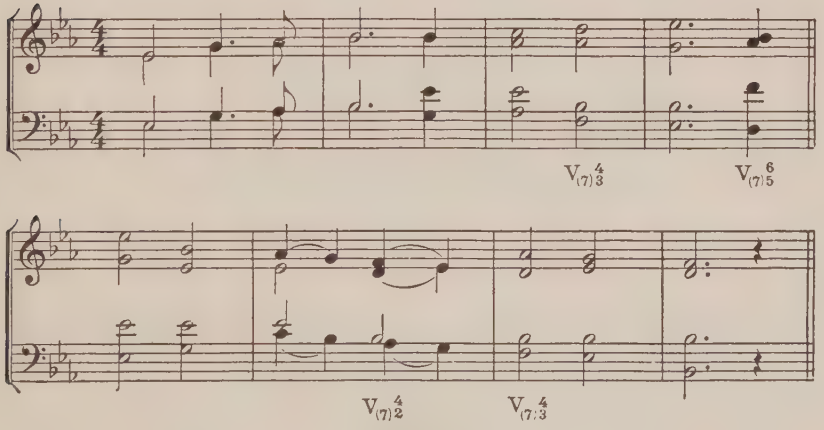


FIGURE 104

Because it is a four-tone chord, the dominant seventh chord may have the choice of four different tones as bass tone:

Fundamental Position, Root in the bass, figured V_7

First Inversion, Third in the bass, figured $V_{(7)}\,{}^{6}_{5}$

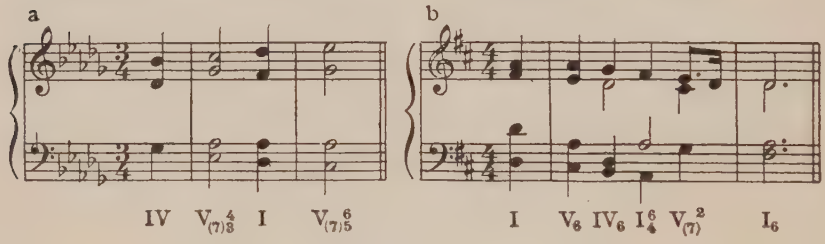
Second Inversion, Fifth in the bass, figured $V_{(7)}\,{}^{6}_{4\,3}$ or $\frac{4}{3}$

Third Inversion, Seventh in the bass, figured $V_{(7)}\,{}^{6}_{4\,2}$, $\frac{4}{2}$ or 2

The figures indicate the intervals from the bass tone up to the other tones of the chord when reduced to its closest position, though convention has established the usual omission of the figures for certain of these intervals. On the other hand, if one of the tones of the chord is to be affected by an accidental, the interval must be indicated by the correct figure accompanied by a sign indicating the chromatic alteration.

In order to simplify the recognition of the chord from its figure indications this course will use the following figures: V_7; $V_{(7)}\,{}^{6}_{5}$; $V_{(7)}\,{}^{4}_{3}$; $V_{(7)}2$, except when accidentals make the inclusion of more figures necessary.

Moonlight Sonata. Second Movement. Beethoven

Hallelujah Chorus, "The Messiah." Handel

Minuet in G. Beethoven

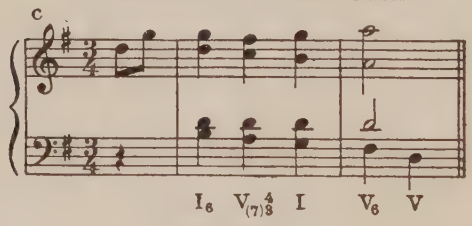



FIGURE 105

In figuring inversions of the dominant seventh chord in minor keys, we shall employ a traditional device for indicating that interval above the bass tone which must be sharped to effect the leading tone; *i. e.*, by drawing a diagonal line through the figure indicating the tone to be sharped; *e.g.*, $V_{(7)}\,{}^{6}_{4\,3}$; $V_{(7)}\,{}^{4}_{2}$. The first inversion gives the leading tone as the bass tone, the accidental appearing in the bass. When the accidental is a natural (♮), it is customary to indicate it by placing the natural beside the proper figure rather than by a line through the figure. (See Figure 106.)

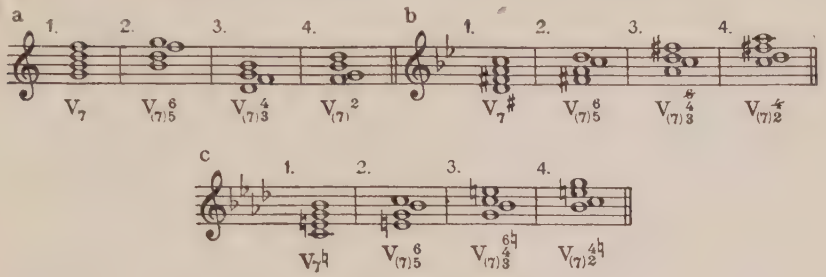


FIGURE 106

For making the bass part more melodic the inversions of the dominant seventh chord are even more useful than those of the triads thus far studied.

The rules governing the progression of each member of the chord remain the same as given in Chapter Eleven; *i.e.*, (*a*) the root (5 of the scale), when in a voice other than the bass, becomes the common tone, (*b*) the third of the chord (7 of the scale) progresses upward to 8, (*c*) the fifth of the chord (2 of the scale) progresses usually downward to 1, sometimes, though rarely upward to 3, (*d*) the seventh of the chord (4 of the scale) progresses downward to 3. (See Figure 107.) Also study the resolutions of the dominant seventh chords in the quotation from "Truro" (Figure 104). Inversions of the dominant seventh chord usually include all the tones of the chord.

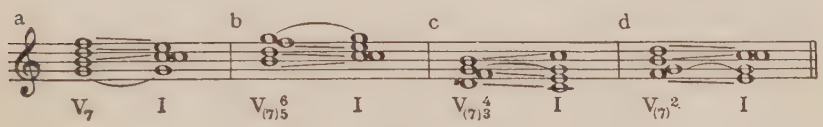


FIGURE 107

Certain progressions involving inversions of the dominant seventh chord appear frequently in familiar music. These progressions are tabulated below, and are illustrated in Figure 108.

MELODY PATTERN	CHORD PROGRESSION	BASS TONES
(*a*) 3–4–5	$I–V_{(7)}{}^{4}_{3}–I_{6}$	1–2–3
(*b*) 5–4–3	$I_{6}–V_{(7)}{}^{4}_{3}–I$	3–2–1
(*c*) 6–7–8	$IV–V_{(7)}{}^{4}_{3}–I$	4–2–1
(*d*) 3–2–1	$I–V_{(7)}2–I_{6}$	1–4–3
(*e*) 3–2–1	$I^{6}_{4}–V_{(7)}2–I_{6}$	5–4–3
(*f*) 3–2–5	$I–V_{(7)}2–I_{6}$	1–4–3
(*g*) 3–2–5	$I^{6}_{4}–V_{(7)}2–I_{6}$	5–4–3
(*h*) 3–4–3	$I–V_{(7)}{}^{6}_{5}–I$	8–7–8
(*i*) 3–4–3	$I–V_{(7)}{}^{4}_{3}–I$	1–2–1

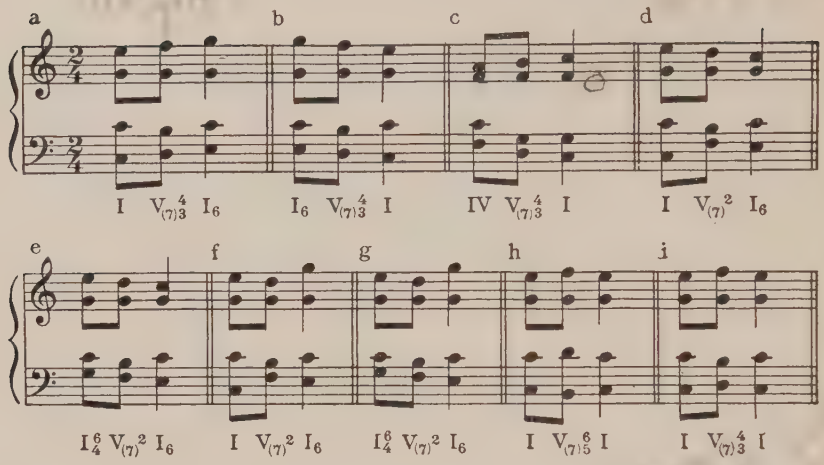
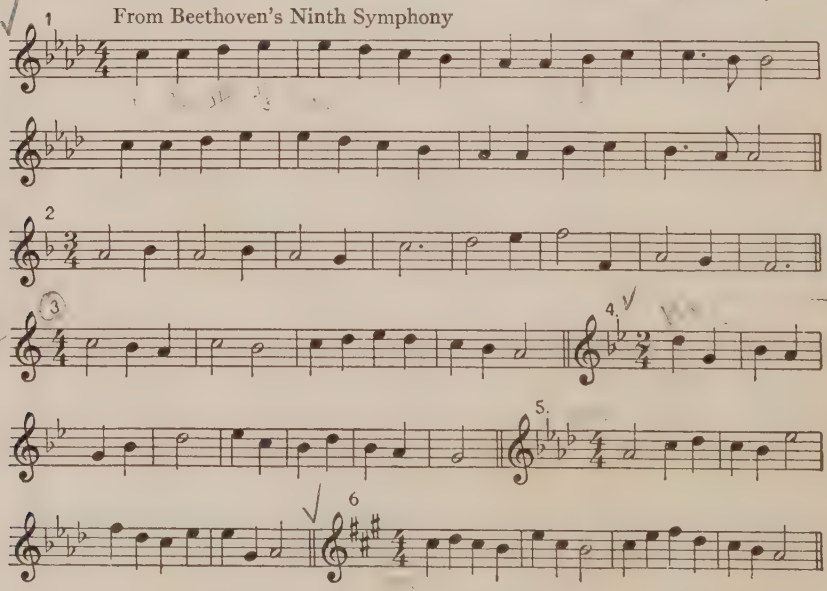



FIGURE 108

II. Chord Building. [1–*a*] *Write and play the three inversions of the dominant seventh chord in all major and minor keys, followed by the tonic triad with proper voice connections.*

III. Harmonizing Melodies. [1–*b*] *The melodies of Exercise 63 are to be harmonized, using inversions of the dominant seventh chord where appropriate.*

EXERCISE 63.

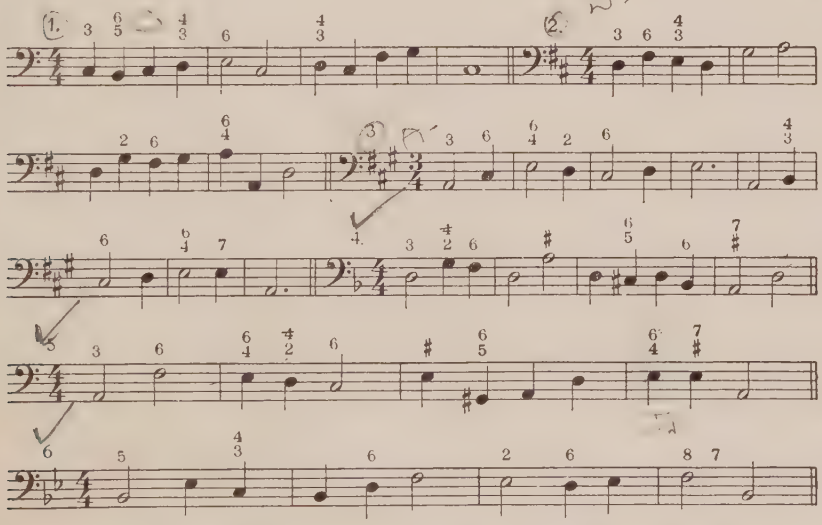


IV. Melodic Invention. [1–*c*] The writing of original melodies now becomes increasingly interesting because smoother melody is made possible through the use of inversions of the dominant seventh chord. Inversions of the dominant seventh chord lend themselves well to the common tone principle of chord connection, but at this point it is no longer necessary to insist upon strict adherence to this principle in all triad progressions. Be careful, however, that contrary motion is employed when the common tone principle is set aside while using triads in the fundamental position.

The melodic patterns given in the introductory statement above (Figure 108) will aid the pupil in the invention of melodies in which inversions of the dominant seventh chord may appear in natural progression. Free use should be made of non-harmonic tones in the melody.

V. Harmonizing Basses. [1-*d*] *Harmonize the basses of Exercise 64.* In the last measure of No. 6 let the seventh of the dominant seventh chord follow the root as a second quarter note, thereby producing a passing seventh. (See Figures 118 *b*, 119, 126 *a*.)

EXERCISE 64.



VI. Keyboard Harmony. [1–*e*] *The melodic patterns with their harmonizations as shown in Figure 108 should be practiced in all major and minor keys.* Constant keyboard application should be made of every step.

VII. Ear Training. [1 *f*] At first the material for this work should be taken from the melodic patterns of Figure 108. Later, longer exercises should be used. The practice of responding by Roman numerals to successions of chords played by the teacher should be continued.

VIII. Harmonic Analysis. [1–*g*] *Find and mark with the proper numerals all inversions of the dominant seventh chord in assigned familiar hymns and simple piano compositions.* (See Figures 61, 70, 73, and 119.)

IX. Free Composition. [1–*h*] An assignment in free composition should be given during the study of this chapter.

Minuet from Symphony in G minor. Mozart

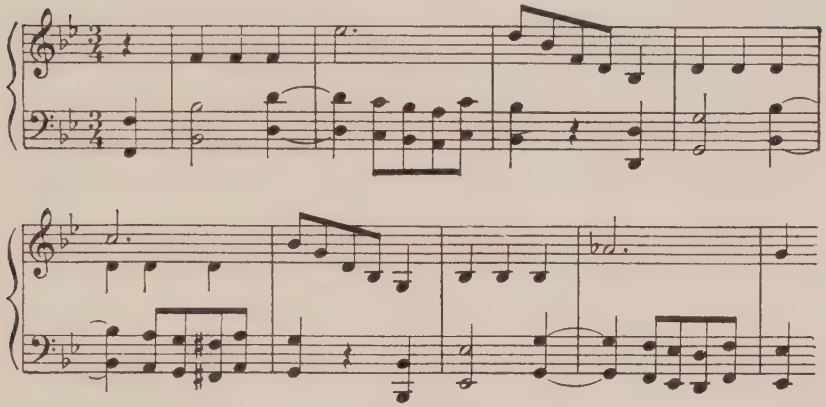



FIGURE 109

CHAPTER FIFTEEN

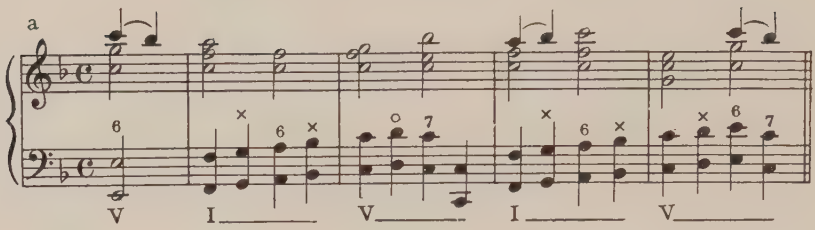
NON-HARMONIC TONES IN THE BASS AND INNER VOICES

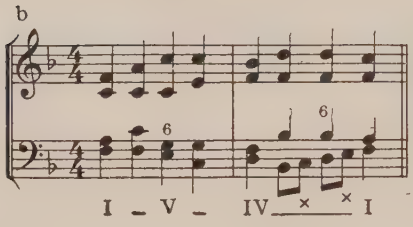
In the same way that non-harmonic tones in the soprano part serve to make the melody smoother and more pleasing, so, likewise, will their employment make the other parts in the harmonic structure more melodious and interesting. Even examples of the simplest music for choruses, such as hymn tunes, frequently use these tones, and instrumental music abounds with them. You must learn to distinguish them readily in the musical mass, and, by observing the manner of their employment by master composers, learn to appreciate their significance and how to use them artistically.

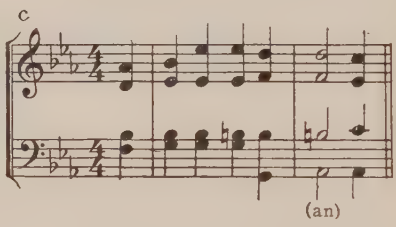
STEP ONE. *Non-Harmonic Tones in the Bass*

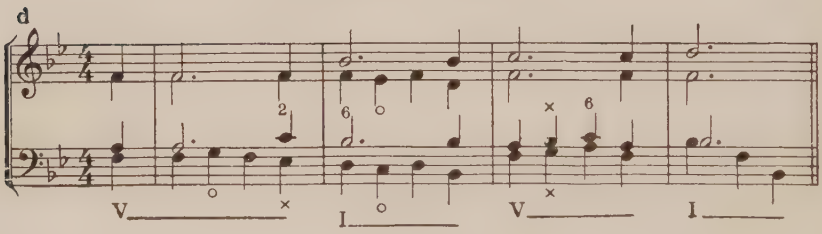
I. Introductory Statement. All types of non-harmonic tones may be found in the bass part, though passing tones and auxiliary tones are probably used more frequently than the other types. Figure 110, *a* to *f* inclusive, gives examples of the use of non-harmonic tones in the bass, and should be studied carefully before undertaking the assignments of this step. The organ point (sometimes called pedal point) is a tone sustained by the bass while the other voices progress through various harmonies, some of which are at variance with the bass tone. (See Figure 57.)

Finale to "Pinafore." Sullivan

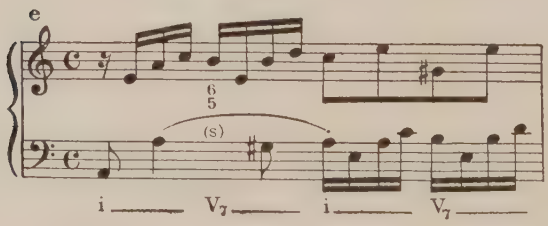
a

Hark, a Thrilling Voice.
W. H. Monk

b

Aurelia. Samuel S. Wesley

c

Creation. Haydn

d

Invention, No. XIII. Bach

e



Moonlight Sonata, Third Movement. Beethoven

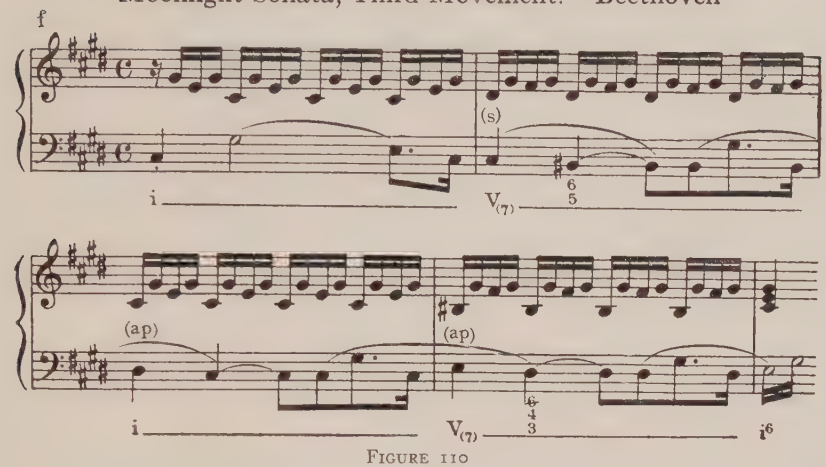
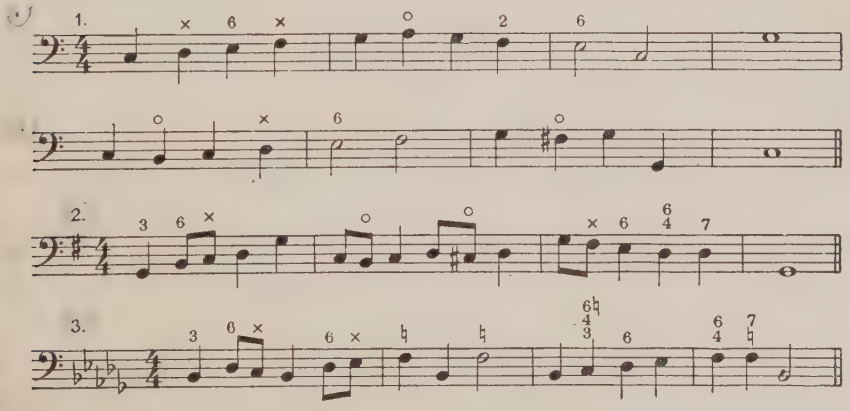
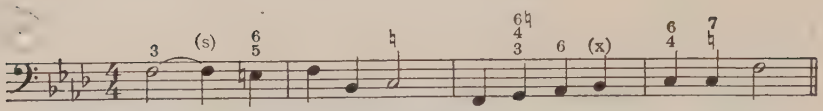


FIGURE 110

II. Harmonizing Melodies. [1–*a*] *Review the assignments of earlier chapters and discover effective places for non-harmonic tones in the bass part.* As intimated above, you will probably find the greatest possibilities for the use of passing tones and auxiliary tones, but do not hesitate to attempt the use of other types of non-harmonic tones wherever your fancy suggests their interesting and suitable employment.

III. Harmonizing Basses. [1–*b*] *In Exercise 65 you will find basses for harmonization which include non-harmonic tones.* These are indicated according to the markings of Chapter IX. Additional interest will be given the invention of the soprano part of these exercises if you endeavor to employ non-harmonic effects corresponding to, or imitating the effects in the bass. Possible inversions of the chord are not always indicated. The connected eighth notes suggest the note values of the upper voices.

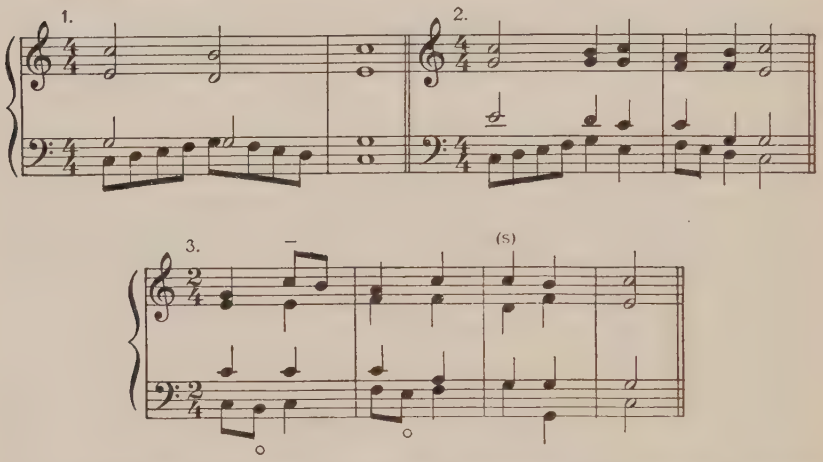
EXERCISE 65.



IV. Keyboard Harmony. [1–*c*] All written work of this step should be practiced at the keyboard.

V. Ear Training. [1–*d*] Beginning with simple chord connections in which non-harmonic tones occur in the bass, the teacher gradually includes in this assignment some of the less involved exercises of four and eight measures length. See Exercise 66 for the first exercises in this assignment.

EXERCISE 66.



VI. Harmonic Analysis. [1–*e*] This assignment is probably the most important one of the present step. You should carefully study much music for both voices and piano and mark all instances of non-harmonic tones in the bass with the signs given in Chapter Nine. Remember that any combination of tones reducible to thirds may be classified as a chord, and therefore such a combination should seldom be marked as containing non-harmonic tones. The advice of the teacher will sometimes be needed in determining doubtful examples. See the third measure of Figure 112 *a*, which may be classified in several different ways.

Among the familiar compositions which contain examples of non-harmonic tones in the bass, the following are suggested for your examination: — organ points in Sonata in G major, Op. 49, No. 2, Beethoven; Shepherds' Dance from Henry VIII, German; Freischütz Overture, Weber; How Lovely Are the Messengers, from "St. Paul," Mendelssohn; Witches' Dance, MacDowell; The Two Grenadiers, Schumann; etc. Auxiliary tones will be found in Rondo Capriccioso, Mendelssohn; Tarantelle, Heller; Two-Part Invention, No. 6, Bach; etc. Passing tones are found in the

Polish Dance, Scharwenka; Minuet from the Military Symphony, Haydn; etc. Observe the suspension in Bach's Two-Part Invention, No. 13. (See Figure 110 *e*.) In Schumann's Träumerei you will find a changing tone in the bass. Appoggiaturas in the bass occur in the third movement of Beethoven's Sonata, Op. 27, No. 2 (Moonlight). (See Figure 110 *f*.) Study also the non-harmonic tones in the basses of Figures 17, 21, 28, and numerous other examples in this book.

VII. Free Composition. [1–*f*] An assignment in free composition should be given during the study of this chapter. Previous directions continue here. Strive for beauty and variety in your compositions through the employment of all the devices with which your lessons have made you familiar, though no strict requirements in this respect are imposed.

Liebestraum. Liszt

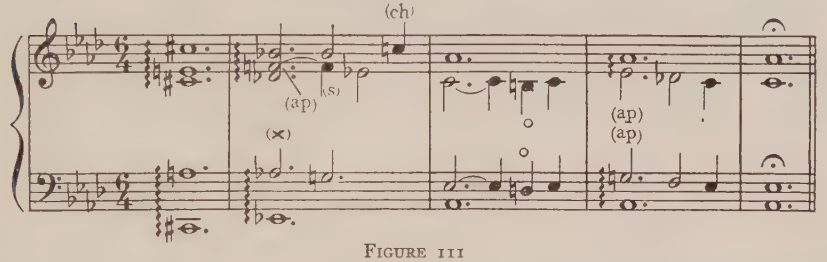


FIGURE 111

STEP TWO. *Non-Harmonic Tones in the Inner Voices*

I. Introductory Statement. No new rules or definitions are necessary at this point, for all types of non-harmonic tones occur in the inner voices of musical compositions. (For examples, see Figure 112.) The following general comments may be helpful:

(1) Passing tones and auxiliary tones not only occur freely but also are often found in passages in which the alto part parallels the soprano, or the tenor part parallels the bass in thirds or sixths. (See Figure 112, *a* to *c* inclusive.) Sometimes the inner voices parallel each other. (See Figure 112 *e*.)

(2) Figure 112 *d* illustrates the appoggiatura in an inner part.

(3) Imitative scalewise passages occur in the several parts, involving the use of passing tones. (See Figure 112 *f* and *g*.)

(4) Suspensions are common in both the alto and the tenor parts. (See Figure 87 *b* and Figure 112 *h*). The suspension of the keynote, displacing and resolving into the leading tone during the final cadence, is particularly effective.

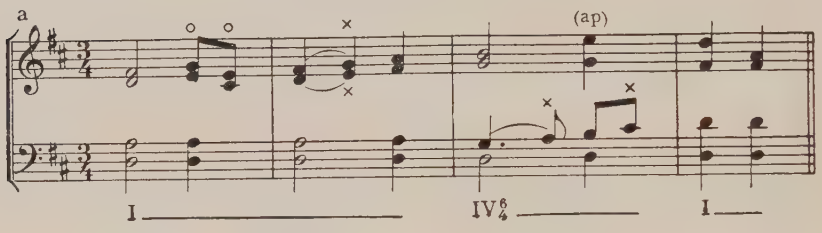
(5) Anticipations may occur alone or in conjunction with anticipations in the soprano, sometimes in two and sometimes in three voices. (See

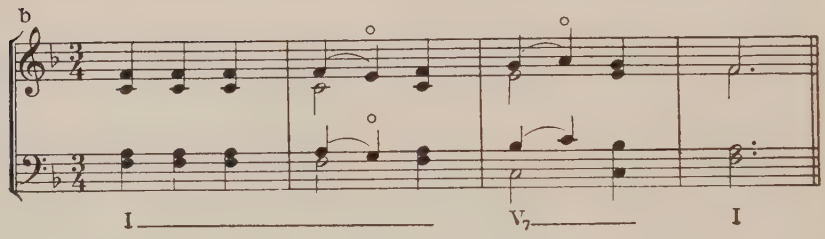
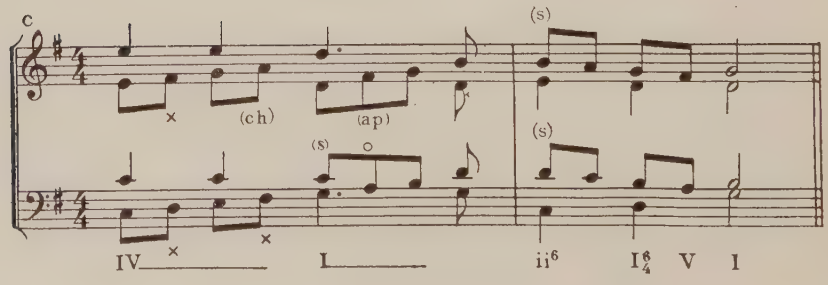
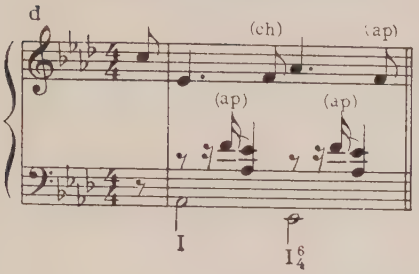
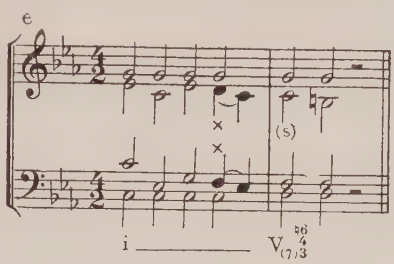
Figure 112 *i* and Figure 87 *a*.) Sometimes all four voices will unite in a rhythmic anticipation, as in Figure 112 *j*.

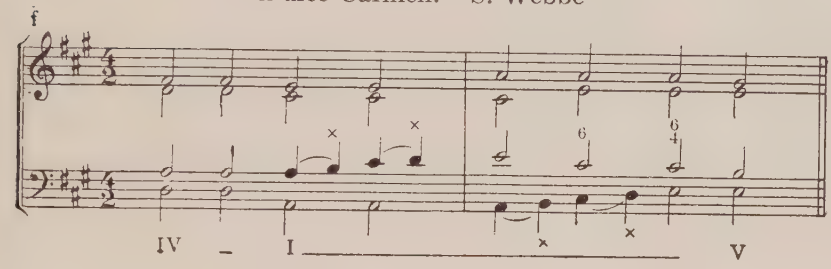
(6) The stationary tone in an upper or inner part, while not common, nevertheless may occasionally be found in familiar music. (See Figure 112 *k* and *l*. Also see Figure 58.)

(7) Changing tones are occasionally found in an inner voice. (See Figure 112 *m*.)

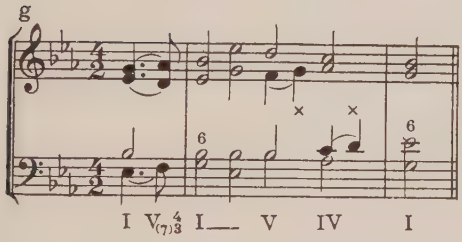
Come, My Soul. Haydn

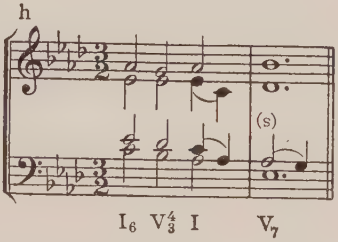


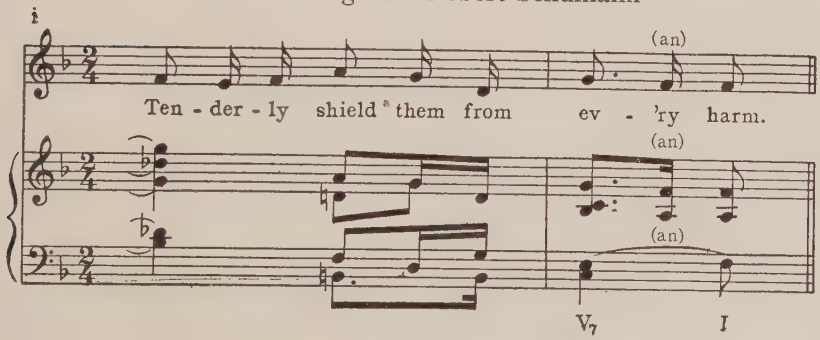
Sun of My Soul. Ritter-Monk

Nativity. Gauntlett

Narcissus. Ethelbert Nevin

St. Andrew of Crete. J. B. Dykes

Dulce Carmen. S. Webbe



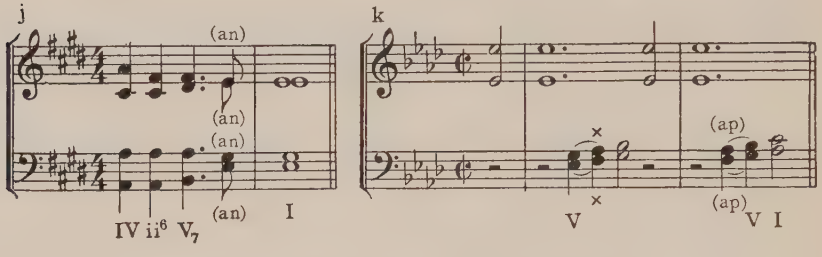
Christmas. Handel

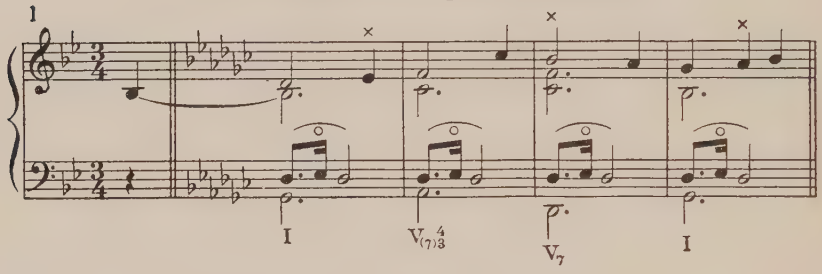


Lead, Kindly Light. J. B. Dykes

Guardian Angels. Robert Schumann



Holy, Holy, Holy. Dykes

Rejoice, Ye Pure in Heart.
A. H. Messiter

Second Mazurka, Op. 54. Godard



Finale, 8th Symphony. Beethoven

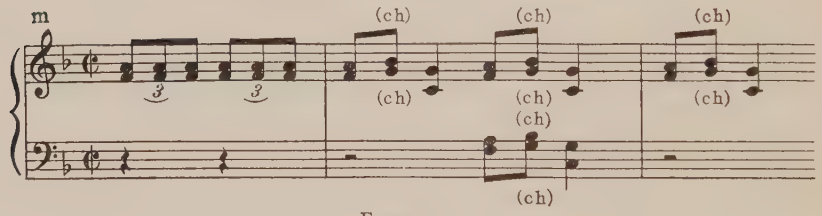


FIGURE 112

II. Harmonizing Melodies. [2–*a*] *Review the assignments of earlier chapters and discover effective places for non-harmonic tones in the inner voices.*

III. Harmonizing Basses. [2–*b*] *Review the assignments of earlier chapters and discover effective places for non-harmonic tones in the inner voices.* Not only strive for the effective employment of non-harmonic tones in the inner voices, but also give the outer voices (soprano and bass) melodic treatment in the same manner.

IV. Keyboard Harmony. [2–*c*] *All written work of this step should be practiced at the keyboard.*

V. Ear Training. [2–*d*] Beginning with simple chord connections in which non-harmonic tones occur in the inner voices, the teacher gradually

includes in this assignment some of the less involved exercises of four and eight measures length. The material of Figure 112 may be used for written and keyboard dictation.

VI. Harmonic Analysis. [2–e] *This assignment is of the utmost importance. Study much music, for both voice and piano, and mark all instances of non-harmonic tones in all the voices with the signs given in Chapter Nine.* Among the familiar compositions which contain examples of non-harmonic tones in the inner voices, the following are suggested for your examination: — a stationary tone occurs in the Two-Part Invention, No. 3, Bach; the first movement of Beethoven's Sonata, Op. 27, No. 2 (Moonlight); Brahm's Waltz, No. 1; the final measures of the Pilgrims' Chorus from Wagner's "Tannhäuser"; Mendelssohn's "Songs without Words," Numbers 4, 16, 23, 33, 35, 38, 41, 44, and 47; etc. Other examples of various types of non-harmonic tones in inner voices occur in Rubinstein's Melody in F; Godard's Second Mazurka; the Hallelujah Chorus from Handel's "Messiah"; Scharwenka's Polish Dance; Chaminade's Flatterer; etc.

My Heart at Thy Sweet Voice, from "Samson and Delilah."
Saint-Saëns

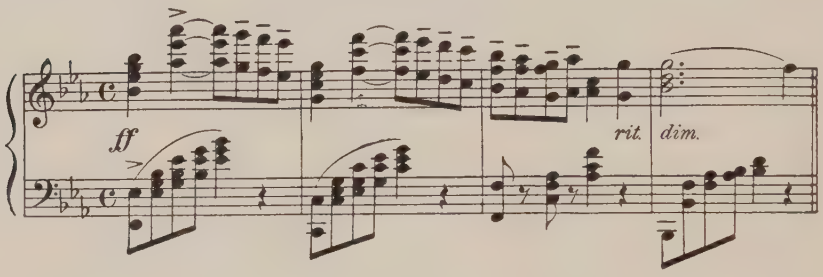



FIGURE 113

CHAPTER SIXTEEN

SECONDARY, OR SUBSTITUTE TRIADS

In your analysis of hymns and piano music you have met many chords as yet unclassified. Any chord which can be reduced to three tones related to each other as root, third, and fifth is a triad. Through the analysis of the first six measures of America (Figure 114) you will discover six examples of triads other than the tonic, dominant, and subdominant. Three of these are examples of the triad on the sixth degree of the scale, and three are examples of the first inversion of the triad on the second degree of the scale. Figure 115 includes triads on the third and seventh degrees.

America. Carey

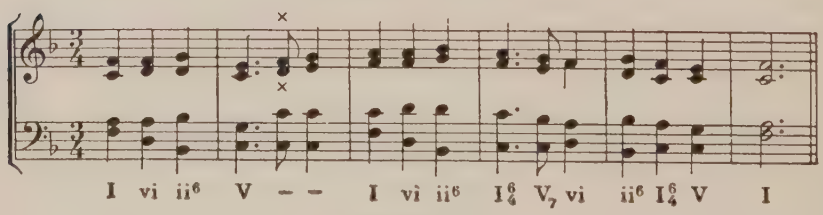
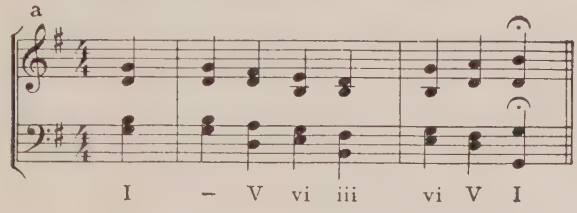



FIGURE 114

The triads studied thus far (I, V, and IV) are called *primary triads* because they include in their most important harmonic relationships all

the tones of the diatonic scale of a key. The triads on 2, 3, 6, and 7 of the scale (ii, iii, vi, and vii°) are called *secondary triads* because they are less essential to the expression of the harmonic content of a key.

Old Hundred. Louis Bourjeois

Evening. W. H. Monk

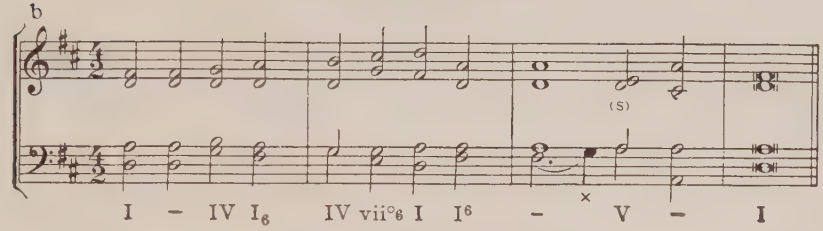



FIGURE 115

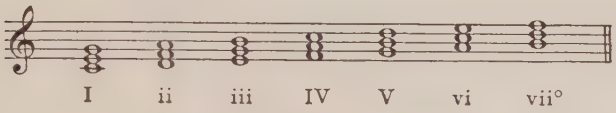
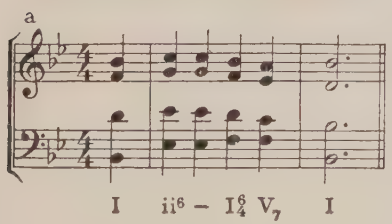


FIGURE 116

The secondary triads are also known as *substitute triads* because each of them is closely related in content and in function to one of the primary triads. Therefore, under certain conditions, each may be substituted in place of the latter to secure harmonic variety. In major keys the three primary triads are major, and their substitutes are minor triads. There is greater variation in minor keys, as we shall discover later.

Battle Hymn of the Republic



Integer Vitae. Flemming

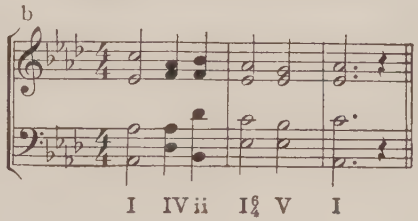


FIGURE 117

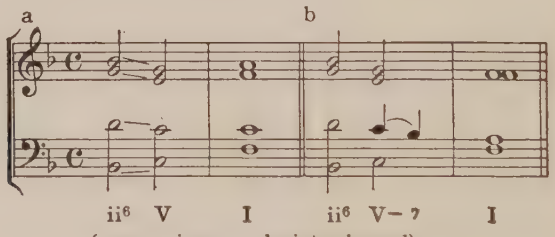
STEP ONE. *The Triad on the Second Degree of the Scale, ii*

I. Introductory Statement. Of the several secondary triads, the one on the second degree of the scale, ii, is probably used most frequently. It is called the *supertonic triad*. It is a minor triad, and appears most frequently in its first inversion, ii_6 (see Figure 117 *a*), often in the fundamental position (see Figure 117 *b*), but rarely in the second inversion.

Since this chord is closely related to the subdominant triad, with two tones, 4 and 6 of the scale, in common with the latter, it is often used as a substitute for IV in the cadence, IV–I^6_4–V_7–I, *e.g.*, ii–I^6_4–V_7–I, or ii_6–I^6_4–V_7–I. The melodic pattern for this progression will usually be 2–1–7–1; also frequently 4–3–2–1.

Because the third of this triad (4 of the scale) is one of the most important tones of the scale, and because the triad (ii) functions as a substitute for IV, the use of the triad in the first inversion with the bass tone (third of the chord) doubled in an upper voice is usually most effective. This arrangement of the chord (ii_6) leads naturally into I^6_4 by step-wise progression of the bass.

The triad ii (or ii_6) may also appear as a substitute for IV in the progressions and cadences, ii–V, ii_6–V, ii–V_7, and ii_6–V_7. In this progression the common tone is ignored and contrary motion applied, exactly as with the progression IV–V. (See Figure 118 *a*.) When ii or ii_6 is followed directly by V, the resolution of V to I is effected by the application of the common tone principle, or by the introduction of the seventh of the dominant chord as a passing tone with the customary resolution of V_7. (See Figure 118.)



(upper voices may be interchanged)

FIGURE 118

II. Chord Building. [1–*a*]

(1) *Spell, write, and play the supertonic triad in all major keys.*

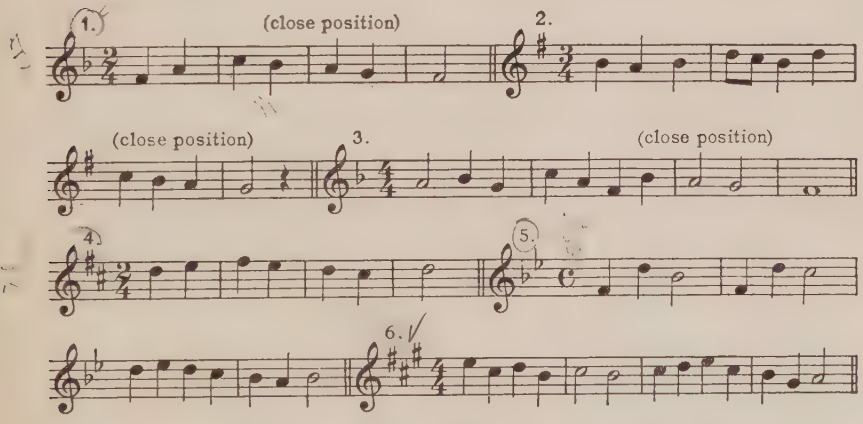
(2) *Write and play the cadences ii–I^6_4–V_7–I and ii_6–I^6_4–V_7–I in all major keys, using the melodic patterns 2–1–7–1 and 4–3–2–1. Occasionally substitute V for V_7.*

(3) *Write and play the cadences ii–V–I and ii_6–V–I in all major keys, using the melodic patterns 2–7–1, 4–2–3, and 6–5–5.*

(4) *Write and play the cadences ii–V_7–I and ii_6–V_7–I in all major keys, with the melodic patterns 2–7–1, 4–2–1, and 6–5–5, using the common tone principle for the latter pattern. Occasionally have the seventh of V_7 appear as a passing tone, as in Figure 118 b.*

III. Harmonizing Melodies. [1–*b*] *Harmonize the melodies of Exercise 67, using the chords ii and ii_6, where appropriate.* You must exercise care in the voice leadings both to and from the chord ii. Usually the best leading will be by means of contrary motion, even where a common tone is present. Wherever the voices are led in the same direction you should see that in no case do two parts carry the same melodic progression (parallel unisons or octaves), nor should the interval of a perfect fifth occur in the same parts in two successive chords. The rule to avoid parallel octaves and fifths is universally observed except where a particular and conscious effect is intended. Parallel octaves occur when two voices, an octave apart, move to the next chord and remain an octave apart. Parallel fifths occur when two voices, a perfect fifth apart, move to the next chord and remain a perfect fifth apart. These conditions do not apply when the two voices remain stationary.

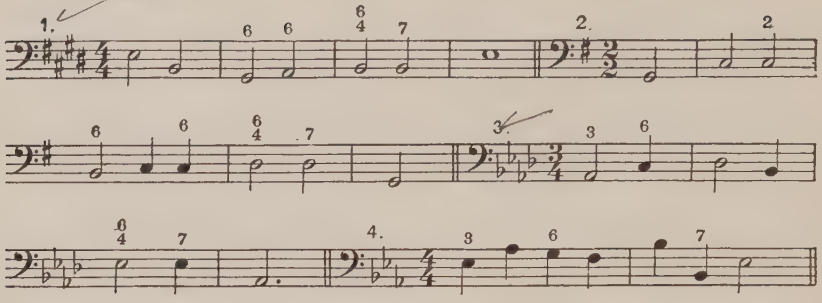
EXERCISE 67.



IV. Melodic Invention. [1–*c*] *Invent melodies involving the melodic patterns listed below, planned for appropriate harmonization with the use of the ii and the ii_6 chords: 2–7–1, 4–2–3, 4–2–1, 6–5–5, 2–1–7–1, and 4–3–2–1.*

V. Harmonizing Basses. [1–*d*] *Harmonize the basses of Exercise 68, using the chords ii and ii_6.* Harmonize the figured bass tones as indicated. The other bass tones may be harmonized according to your best judgment. This applies to all basses from this point on.

EXERCISE 68.



VI. Keyboard Harmony. [1–*e*]

(1) *Play the melodic patterns 2–7–1, 4–2–3, 4–2–1, and 6–5–5, in all major keys, harmonized appropriately with the proper choice of the following progressions ii–V–I, ii–V_7–I, ii_6–V–I, and ii_6–V_7–I.*

(2) *Play the melodic patterns 2–1–7–1 and 4–3–2–1 in all major keys, harmonized with the progressions ii–I^6_4–V_7–I and ii_6–I^6_4–V_7–I.*

VII. Ear Training. [1–*f*] For this lesson you may use the harmonized melodic patterns of this step, harmonized melodies such as are given in Exercise 67, and the original melodies of assignment [1–*c*].

(1) *Written Dictation*

(2) *Keyboard Dictation*

VIII. Harmonic Analysis. [1–*g*] *Find and mark with ii or ii_6 examples of this chord in hymns, folk songs, and piano music.* Among the familiar compositions in which the chord occurs are: Andante from the "Surprise Symphony" by Haydn; Mendelssohn's "Spring Song"; the hymn tune, "St. Agnes," by Dykes; the first movement of Beethoven's Sonata in G major, Op. 49, No. 2; Poldini's "Poupée Valsante" (Dancing Doll); "Eventide" by Monk; etc. (See also Figures 60, 70, 77, etc.)

IX. Free Composition. [1–*h*] *An assignment in free composition should be completed during the work of this chapter.* You should try to use the new material as it is taken up in your lessons, though this is not a rigid requirement.

Eventide. Monk

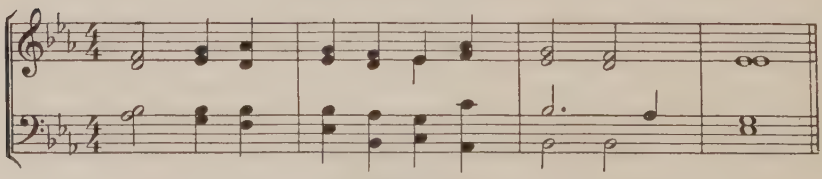


FIGURE 119

STEP TWO. *The Triad on the Sixth Degree of the Scale, vi*

I. Introductory Statement. In the fourth measure of "America" (See Figure 114) and in Figure 119 you will find examples of the most common use of the triad on the sixth degree of the scale, *i.e.*, as a resolution of V_7. The triad, vi, is a minor triad, is called the *submediant triad*, and seldom appears in an inversion. It has two tones in common with the tonic triad, 1 and 3 of the scale, and frequently appears as a substitute for I.

In your studies you have learned that the dominant seventh chord strongly demands a resolution. Heretofore this resolution has always been to the tonic triad. In the examples quoted, the effect of V_7–vi is quite unexpected, and when this progression occurs at the close of a phrase it is called a *deceptive cadence*. The chord, vi, may thus be used as a substitute for the I in a cadence. (See Figure 120.)

The Battle Prayer. Himmel

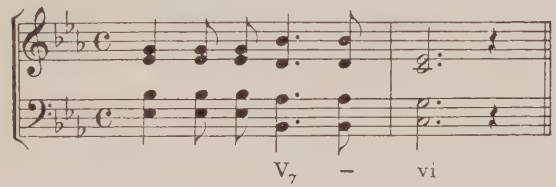
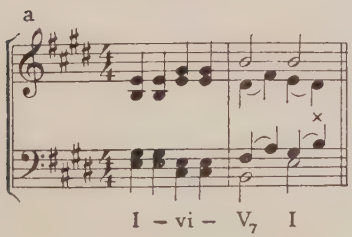



FIGURE 120

Another way in which the submediant triad may serve as a substitute for the tonic triad is by following the tonic triad and harmonizing tones common to both triads. (See Figure 114, measures 1 and 3; Figure 121, *a* and *b*; Figure 154 *b*.) Occasionally the common tones occur only in the inner voices. (See Figure 121 *b*.)

Holy, Holy, Holy. Dykes



Prelude, "Lohengrin." Wagner

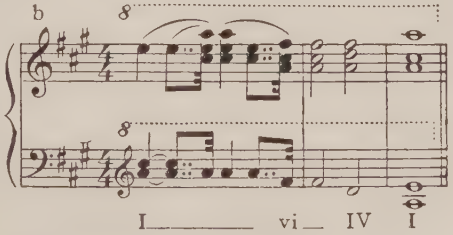



FIGURE 121

While the chord vi may progress readily in a number of ways, it is peculiarly effective when preceding ii, especially ii_6, paralleling the primary triad progression, V–I. (See Figures 114 and 119.)

The voices of the dominant triad in proceeding to the triad on the sixth degree frequently imitate the movements of the voices of the dominant seventh chord in a similar situation, even though the seventh is not present either with or after the dominant triad. All of the voice movements in V–vi or V_7–vi may also prevail when the order of these chords is reversed, vi–V or vi–V_7.

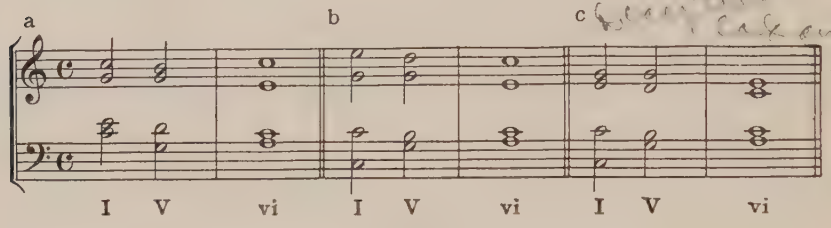


FIGURE 122

Although the root of the chord vi is frequently doubled with good effect, the keynote, 1, will usually be found the best tone to double when following V or V_7, because thereby a better voice leading is possible. Study carefully the voice leadings in Figure 122.

II. Chord Building. [2–*a*]

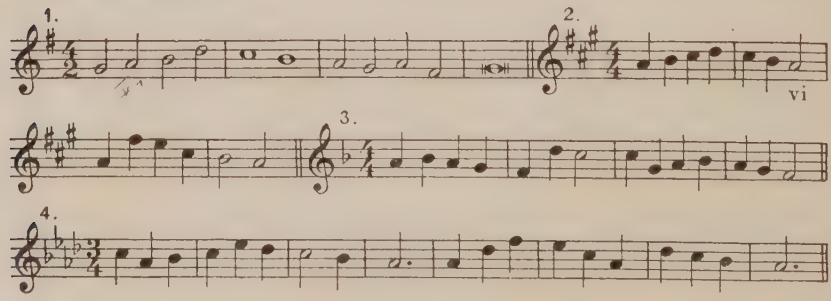
(1) *Spell, write, and play the submediant triad in all major keys.*

(2) *Write the deceptive cadence I–V_7-vi in all major keys, using the melodic patterns 3–2–1, 5–4–3, and 8-7–8, and in all cases doubling the third of the vi triad (1 of the scale.)*

For the Teacher: Show how the doubling of the root of vi may easily lead to parallel fifths, and explain that this progression had better be avoided in elementary harmony because of its poor voice leading and unpleasant effect upon cultivated ears

III. Harmonizing Melodies. [2–*b*] *The melodies of Exercise 69 are to be harmonized, using the chord vi where appropriate.* Use contrary motion when possible in progressing to or from the vi chord, and observe the other directions given in the Introductory Statement of this step.

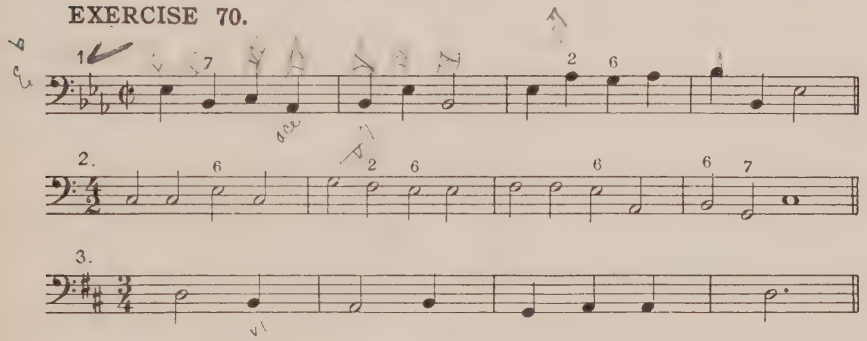
EXERCISE 69.



IV. Melodic Invention. [2-*c*] *Invent melodies in which, by providing for the deceptive cadence or by allowing the chord vi to follow the I, a proper use of the vi may be shown at least once in each melody.* Many interesting harmonic passages can be invented by the use of I, vi, and IV exclusively, with the common tone principle obtaining throughout. Try some of these progressions, and include them in your original melodies when opportunity offers.

V. Harmonizing Basses. [2–*d*] *Harmonize the basses of Exercise 70.*

EXERCISE 70.



VI. Keyboard Harmony. [2–*e*]

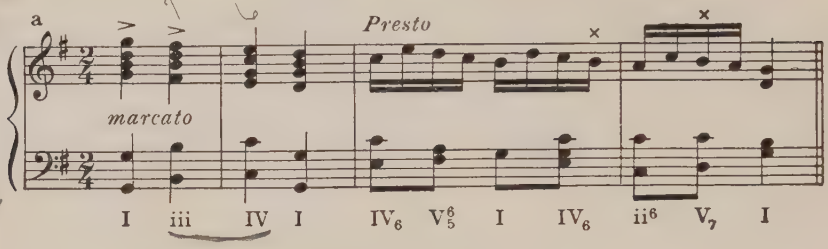
(1) *Play the melodic patterns 3–2–1, 5–4–3, and 8–7–8 in all major keys harmonized by the deceptive cadence, I–V7–vi.* Follow the instructions given above under the assignment [2–*b*].

(2) *Play the melodic patterns 8–7–8, 3–2–1, and 5–5–3 in all major keys, harmonized by the deceptive cadence, I–V–vi, as shown in Figure 122.*

(3) *Transpose the following material into all major keys, noting the effect of the vi chord; Figures 115, 120, 121 a (closing on the third beat of second measure), 121 b, and 122 a, b, and c.*

VII. Ear Training. [2–*f*] For this lesson you may use for written and keyboard dictation the harmonized melodic patterns of this step, harmonized melodies such as are given in Exercise 69, and original melodies as of assignment [2–*c*].

VIII. Harmonic Analysis. [2–*g*] *Find and mark with the symbol vi examples of this chord in hymns, folk songs, and piano music.* Observe whether the vi chord occurs in a deceptive cadence or is used to vary the tonic effect by following a I chord. Try to discover the reason for the use of the chord, as well as the manner in which it is employed. Among the familiar compositions in which this chord occurs, the following may be mentioned: La Czarine, Ganne; Overture, "Midsummer Night's Dream," Mendelssohn; Intermezzo from "Cavalleria Rusticana," Mascagni; La Cinquantaine, Gabriel-Marie; Fifth Nocturne, Leybach; Rustle of Spring, Sinding; Introduction to Poet and Peasant Overture, Von Suppe; etc. (See also Figures 20, 50, 60.)

Swedish Folk Dance

Eventide. W. H. Monk

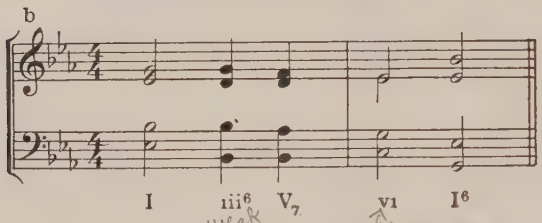


FIGURE 123

STEP THREE. *The Triad on the Third Degree of the Scale, iii*

I. Introductory Statement. Examples of the triad on the third degree of the scale will be found in Figures 115 *a*, and 123. The triad iii is a minor triad, is called the *mediant triad*, and may be used as a substitute for V with which it has two tones in common, 5 and 7 of the scale.

The chord iii appears in three rather familiar progressions:

(1) Harmonizing 7 of the scale in the melodic pattern, 8–7–6–5. (See Figure 123 *a*).

(2) In the so-called feminine cadence, in which the melodic pattern 3–2–1 is harmonized by the progression iii_6–V_7–I. (See Figure 123 *b*.)

(3) In the progression iii to vi, which, it will be observed, is a progression of substitute triads paralleling the primary triad progression V–I. (See Figure 115 *a*.)

In connection with this last statement it is well to remember that just as V progresses most naturally through the common tone principle to I, which is the scale degree a fourth above, so a secondary triad may be used most safely when followed by the triad built on the scale degree a fourth above, for example:

ii to V (best in contrary motion despite the common tone)
vi to ii
iii to vi
These are natural progressions.

II. Chord Building. [3–*a*]

(1) *Spell, write, and play the mediant triad in all major keys.*

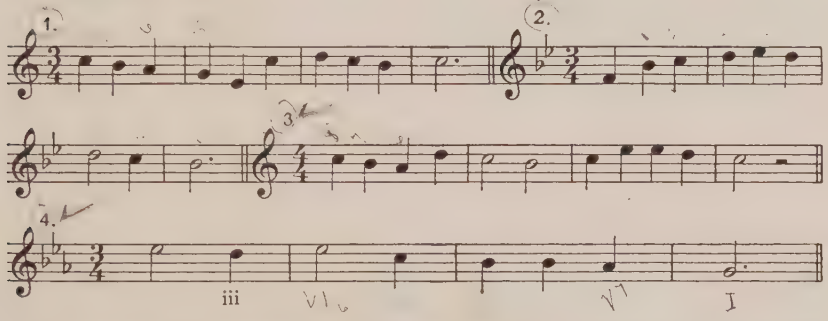
(2) *Write and play the progression I–iii–IV–I in all major keys, harmonizing the melodic pattern 8–7–6–5.*

(3) *Write and play the progression* $I–iii_6–V_7–I$ *in all major keys harmonizing the melodic patterns 3–3–2–1, thereby producing the feminine cadence.*

(4) *Write and play the first phrase of "Old Hundred" in all major keys to illustrate the natural progression iii to vi.* (See Figure 115 *a*.)

III. Harmonizing Melodies. [3–*b*] *Harmonize the melodies of Exercise 71, using the chord iii where appropriate.*

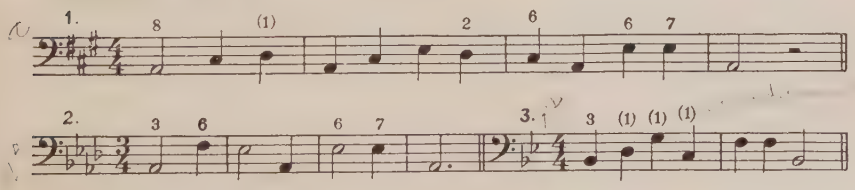
EXERCISE 71.



IV. Melodic Invention. [3–*c*] *Invent melodies in which the following melodic patterns appear, so planned as to use appropriately the iii chord: 8–7–6–5; 3–2–1;* etc.

V. Harmonizing Basses. [3–*d*] *Harmonize the basses of Exercise 72, using the iii chord.*

EXERCISE 72.



(1) Treat these chords as in fundamental position

VI. Keyboard Harmony. [3–*e*] This assignment appears under II, Chord Building.

VII. Ear Training. [3–*f*] *For this lesson you may use for written and keyboard dictation melodic patterns of this step, harmonized melodies such as are given in Exercise 71, and original melodies as of assignment* [3–*c*].

VIII. Harmonic Analysis. [3–g] *Find and mark with the symbol iii examples of this chord in hymns, folk songs, and piano music.* A rich field of such material exists. We suggest the following: the hymn tune, Belmont, by Gardiner; Prelude, Op. 28, No. 20, Chopin; Berceuse from "Jocelyn," Godard; Send Out Thy Light, Gounod; La Czarine, Ganne; Bridal Chorus from "Lohengrin," Wagner; the horn quartet from Der Freischütz Overture, Von Weber; the Andante Cantabile from the String Quartet in D major, Op. 11, Tschaikowsky; etc. (See also Figure 60.)

O Sacred Head Surrounded. Hassler

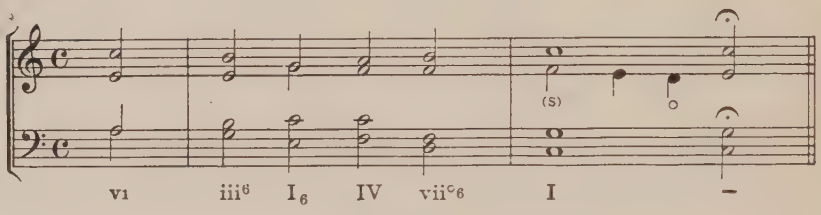



FIGURE 124

STEP FOUR. *The Triad on the Seventh Degree of the Scale, vii°*

I. Introductory Statement. The triad on 7 of the scale, the leading tone triad, consists of a minor third and a diminished fifth above the root. Another statement would be: the leading tone triad consists of two minor thirds. A triad consisting of those intervals is called a diminished triad, and is indicated by the sign "°" at the right of a small Roman numeral, thus, vii°.

The leading tone triad, while not uncommon in the time of Bach and Handel, is seldom used in modern music. The dominant seventh chord embodies all three of the tones of the leading tone triad, and in addition includes the dominant tone of the scale as root. It is therefore a much stronger and more active chord and is usually preferable in harmonizing 7, 2, or 4 of the scale. When it does occur, the leading tone triad may usually be considered a milder or less dissonant substitute for the dominant seventh chord.

The most frequent appearance of vii° is as shown in Figure 124, where it is used as a part of the progression I–IV–vii°$_6$–I, harmonizing the melodic pattern 5–6–7–8. The triad, vii°, is almost always used in its first inversion, the third of the triad is usually doubled, occasionally the fifth is doubled, never the root (except in sequences). This arrangement prevents the bass from participating in the dissonant intervals. The vii° triad may resolve either to I or to I$_6$. (See Figure 125 *a* and *b*.) The leading tone triad may also be used to harmonize the progression IV–vii°$_3$–I with the melodic pattern 1–2–3. (See Figure 125 *c*.)

Observe that in Figure 125 *c*, the melody pattern, 5–6–7–8, is now in an inner part.

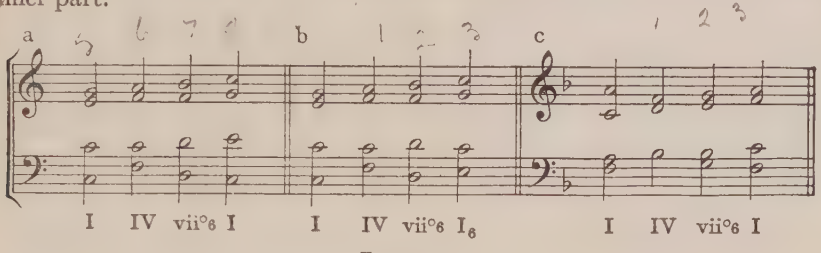



FIGURE 125

II. Chord Building. [4–*a*]

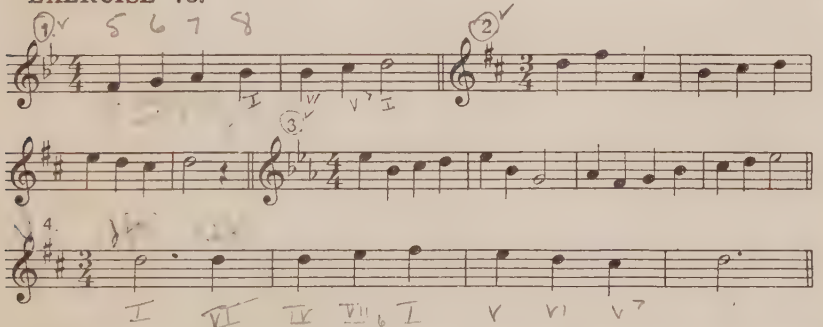
(1) *Spell, write, and play the leading tone triad in all major keys.*

(2) *Write and play the progressions I–IV–vii°$_6$–I and I–IV–vii°$_6$–I$_6$ in all major keys, using the melodic pattern 5–6–7–8.*

(3) *Write and play the progression I–IV–vii°$_6$–I in all major keys, using the melodic pattern 1–1–2–3.*

III. Harmonizing Melodies. [4–*b*] *Harmonize the melodies of Exercise 73, using the chord vii°$_6$ where appropriate.*

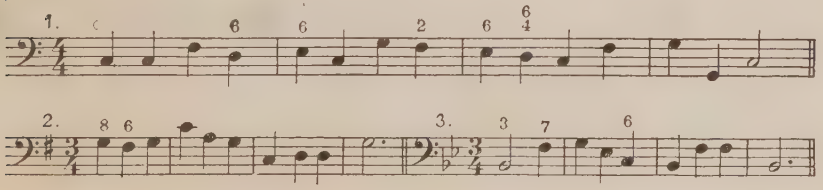
EXERCISE 73.



IV. Melodic Invention. [4–*c*] *Invent melodies involving the melodic patterns, 5–6–7–8 and 1–1–2–3, planned for appropriate harmonization with the use of the vii°$_6$ chord.*

V. Harmonizing Basses. [4–*d*] *Harmonize the basses of Exercise 74, using the chord vii°$_6$ where appropriate.*

EXERCISE 74.



VI. Keyboard Harmony. [4–*e*]

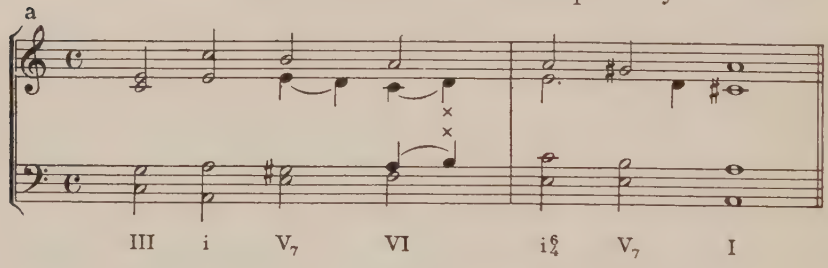
(1) *Play the melodic pattern 5–6–7–8 in all major keys, harmonized with the progression I–IV–vii°$_6$–I; also 1–1–2–3 harmonized with I–IV–vii°$_6$–I.*

(2) *Transpose Figures 124 and 125 into all major keys.*

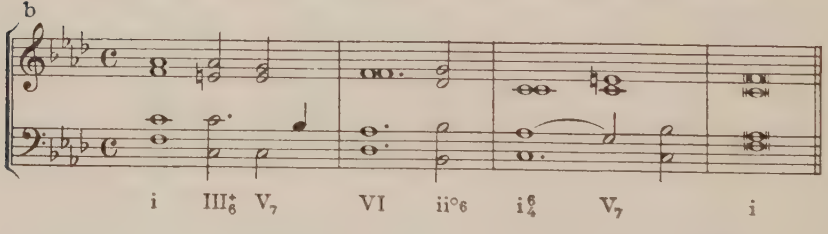
VII. Ear Training. [4–*f*] For this lesson you may use for written and keyboard dictation the harmonized melodic patterns of this step, harmonized melodies such as are given in Exercise 73 and original melodies as of assignment [4–*c*].

VIII. Harmonic Analysis. [4–*g*] *Discover and mark with vii°$_6$ examples of this chord in hymns, folk songs, and piano music.* You will find the chord in the following compositions: "Cast Thy Burden upon the Lord" from "Elijah," Mendelssohn; the hymn tunes, "Alstone" by Willing and "Magdalena" by Stainer; "I Know That My Redeemer Liveth," from "The Messiah," Handel; "Hallelujah Chorus," from "The Messiah," Handel. (See also Figure 60.)

Go to Dark Gethsemane. Christopher Tye

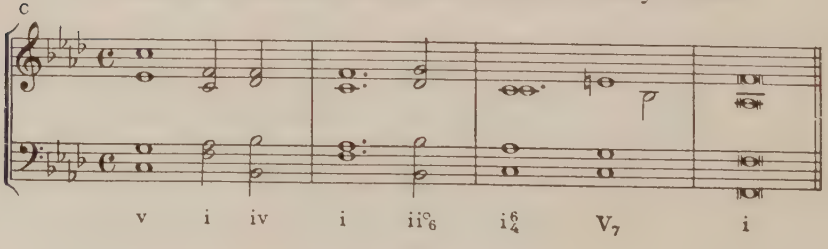
a

O Come and Mourn with Me. Arthur Henry Brown

b

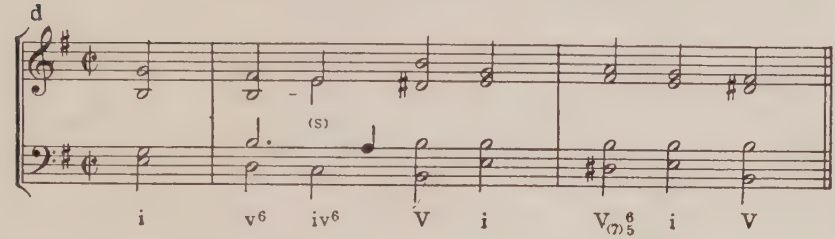


O Come and Mourn with Me. Arthur Henry Brown

c



In Mercy, Not in Wrath. Chetham



Supplication. W. H. Monk

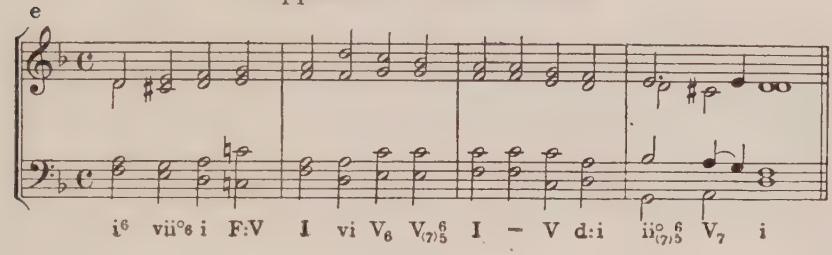


FIGURE 126

STEP FIVE. *Secondary Triads in Minor Keys*

I. Introductory Statement. Figure 127 gives the triads of the harmonic minor scale. Through analysis you will find that minor triads occur on i and iv; that major triads occur on V and VI; that diminished triads occur on ii° and vii°; and that an augmented triad occurs on III+. The augmented triad consists of a major third and an augmented fifth above the root (or two major thirds) and is indicated by the sign (+) placed at the right of the large Roman numeral, *i.e.*, III+.

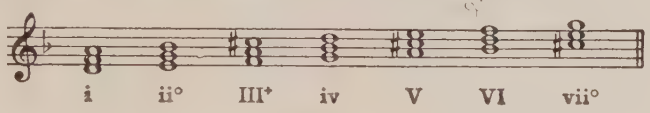


FIGURE 127

Few compositions maintain a minor character throughout. Usually at least a portion of the composition will appear in the relative major key, and often suggestions of other major keys occur. (See Schubert's "Serenade.") For this reason the secondary triads in minor keys are not as commonly used as in major keys. With the exception of the triad on 3 (III+), the secondary triads in minor keys function similarly to the corresponding triads in major keys. The triad on 2 (ii°) is a diminished triad; it functions quite like the triad ii in major keys, though it usually appears in its first inversion.

The triad III+ will usually appear in the fundamental position and will progress to VI. When the melody pattern 8–7–6–5 appears, moving along the descending melodic minor scale, the harmonization will be i–III–iv–i, III appearing as a major triad. (See Figure 128.)

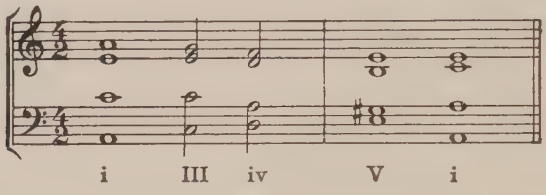


FIGURE 128

Figure 126 illustrates various uses of secondary triads in minor. These you should analyze carefully, both with respect to chord progressions and leading of voices.

II. Chord Building. [5–*a*]

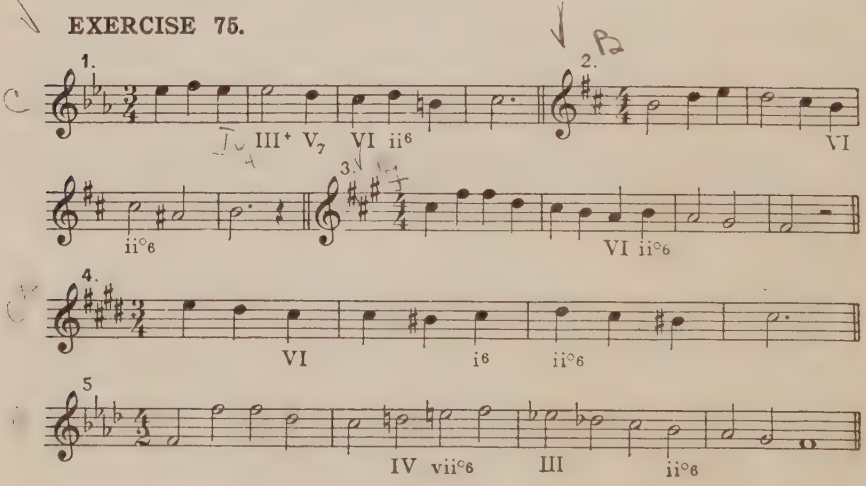
(1) *Spell, write, and play the triads on ii°, III+, VI, and vii° in all minor keys.*

(2) *Write and play the progression i–III+–VI–iv–V–i in all minor keys, using the melodic pattern 8–7–8–8–7–8.*

(3) *Write and play the progression i–vii°$_6$–i$_6$–iv–ii°–i$^6_4$–V–i in all minor keys, using the melodic pattern 8–7–8–6–2–8–7–8.*

III. Harmonizing Melodies. [5–*b*] *Harmonize the melodies of Exercise 75, using the indicated secondary triads.*

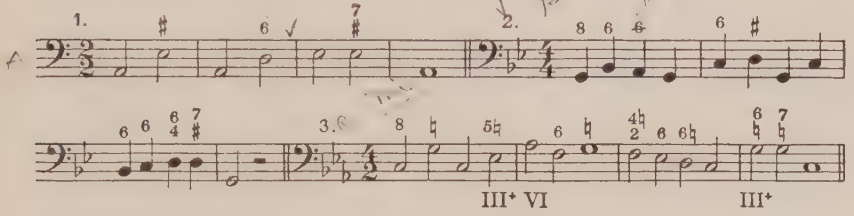
EXERCISE 75.



IV. Melodic Invention. [5–*c*] *Invent melodies in minor keys, using melodic patterns appropriate for harmonizing with secondary triads.*

V. Harmonizing Basses. [5–*d*] *Harmonize the basses of Exercise 76, using the indicated secondary triads.*

EXERCISE 76.



VI. Keyboard Harmony. [5–*e*]

(1) *Play the melodic pattern 3–2–1–7–1 in all minor keys harmonized with the progression i–ii°$_6$– i$^6_4$–V–i.*

(2) *Play the melodic pattern 8–7–8–2–7–8 in all minor keys harmonized with the progression i–III+–VI–ii°$_6$–V–i.*

(3) *Play the melodic pattern 8–7–8–2–8–7–8 in all minor keys harmonized with the progression i–vii°$_6$–i$_6$–ii°$_6$–i$^6_4$–V–i.*

(4) *Transpose the quotations in Figure 126 a, b, c, d, and e into all minor keys.*

VII. Ear Training. [5–*f*] For this lesson you may use for written and keyboard dictation the harmonized melodic patterns of this step, harmonized melodies such as are given in Exercise 75, and original melodies as of assignment [5–*c*].

VIII. Harmonic Analysis. [5–*g*] *Find and mark with correct Roman numerals examples of secondary triads in minor keys in hymns, folk songs, and piano music.* Examples will be found in the following familiar compositions: "Rustle of Spring," Sinding; Schubert's "Serenade"; "Evening Star" from "Tannhäuser," Wagner; Scherzo in E minor, Op. 16, No. 2, Mendelssohn; Song without Words, Op. 62, No. 2, Mendelssohn; "Funeral March" from "Songs without Words," Mendelssohn; Prelude, Op. 28, No. 20, Chopin; etc.

Salut d'Amour. Elgar

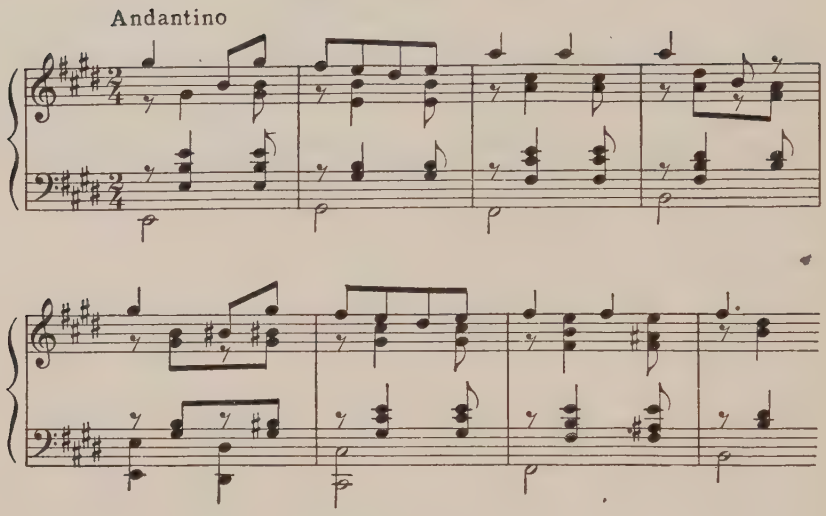


FIGURE 129

CHAPTER SEVENTEEN

MODULATION

Our harmonic analysis has brought us constantly to examples of half cadences and partial cadences where the effect of a partial close is desired. Usually such partial cadences end with the dominant chord, sometimes the subdominant or the chord on the sixth degree of the scale, and occasionally with other chords. There is no feeling of change of key in those partial cadences, merely a sensing of the close of a phrase which demands other phrases to complete the piece as a whole. This is analogous to the use of a comma or semicolon to indicate a temporary resting place in a sentence. "Swanee River" and "Old Kentucky Home" by Stephen Foster provide good illustrations of such incomplete cadences.

Quite as often composers feel that a richer harmonic effect can be produced by leading to the close of an inner phrase of the composition by means of a complete cadence in the key of the dominant, subdominant, or other related key. Such a cadence produces a change of key, but of so transitory a nature that the feeling for the original tonality is not lost. A change of key is called *modulation*. We shall call brief changes of key, as just described, *transitory modulations*. Good illustrations will be found in:

(1) Portuguese Hymn, in which the second phrase closes with the cadence I_4^6–V_7–I in the dominant key;

(2) Duke Street, where the first phrase ends with a transitory modulation, the second and third phrases end with half cadences, and the fourth phrase ends with a complete cadence.

Because of the transitory nature of these changes of key many theorists treat such places merely as tonal shiftings within the original key. Further illustration of this brief key change will occur in the chapter on Borrowed Chords. For our present studies, however, whenever an inner phrase ends with one of the cadence formulas which we have studied in earlier chapters of this book, we shall mark the chords as belonging to the key of the cadence formula; that is, mark the progression as a transitory modulation when the key has been changed. An example will be found in Figure 129.

Modulations, such as we are here considering, will always involve one or more chords which belong both to the key we are leaving and to the key which we are approaching. While there are many other means for modulating, the present study of transitory modulation will treat at first only of modulations effected by means of such common chords and established by definite cadence formulas.

A modulation may be called *temporary* when, after the cadence leads into the new key, the composition remains in that key for a phrase or more before returning to the original key. As a rule, such temporary modulations are prepared by more extended cadences than are necessary for transitory modulations. An excellent example of temporary modulation occurs in Schubert's beautiful song, "The Hedge Roses." You should analyze this song carefully and observe how artistically Schubert effected his modulation.

A *permanent modulation* occurs when the change of key continues for so long a time that the tonal consciousness has shifted to the new key. Examples of permanent modulations will be found in all sonatas and in most other extended compositions. Observe the splendid example in Chopin's "Funeral March." Our present exercises must necessarily be brief; therefore only transitory and temporary modulations will be employed.

Bridal Chorus from "Lohengrin." Wagner

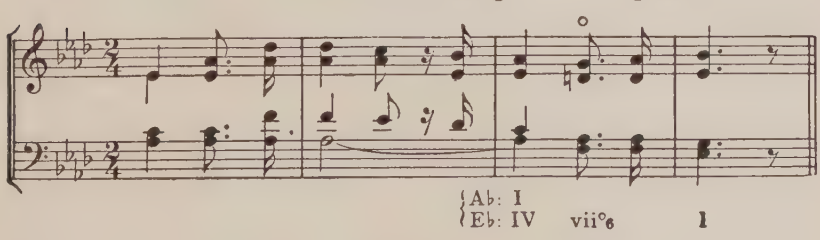



FIGURE 130

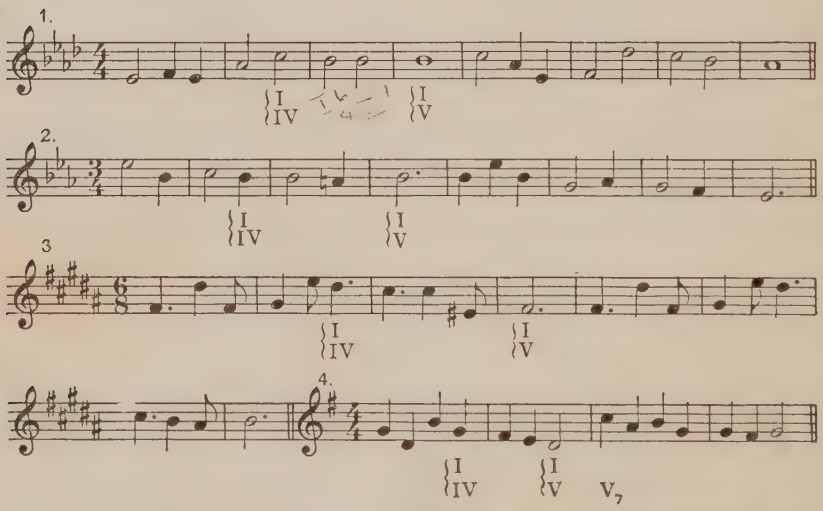
STEP ONE. *Modulations to the Dominant Key in Major, by Means of a Common Chord*

I. Introductory Statement. In the present step all modulations will be effected by means of a common chord leading into a cadence in the dominant key.

II. Harmonizing Melodies. [1–*a*] *Harmonize the melodies of Exercise 77.* These exercises are so arranged that the first phrase of each ends with the cadence formula I^6_4–V_7–I, in the dominant key.

To the Teacher: Place the name of the new key with the first Roman numeral of that key. Also indicate the return to the original key by key name and numeral applied to the first chord of the return. It will be interesting for the student to undertake to harmonize some of the melodies at the piano without first writing them out.

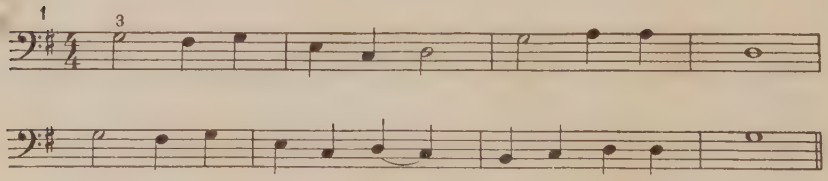
EXERCISE 77.

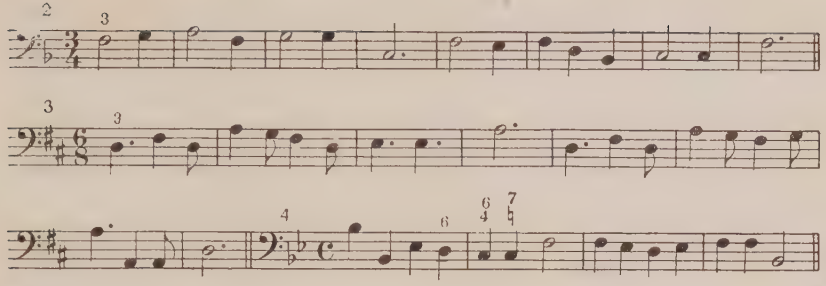


III. Melodic Invention. [1–*b*] *According to previous directions, invent melodies of eight or more measures, including the modulation as described.*

IV. Harmonizing Basses. [1–*c*] *Harmonize the basses of Exercise 78, using a common chord as a means for modulation.*

EXERCISE 78.





V. Keyboard Harmony. [1–*d*] *At the piano, exemplify modulation to the dominant in every major key, according to the following routine:*

(1) Establish the feeling for the original key by playing any group of pertinent and properly connected chords, ending with the tonic, I.

(2) Play I_4^6–V (or V_7)–I in the dominant key, connecting the I_4^6 properly with the preceding chord according to the common tone principle.

(3) Establish the feeling for the new key by means of a well-defined cadence.

(4) Continue through the circle of keys.

VI. Ear Training. [1–*e*] *Use the material of Exercise 77 and similar material for written and keyboard dictation.*

VII. Harmonic Analysis. [1–*f*] *The new topic is modulation to the dominant key by means of a common chord.* Modulation by means other than described in this step may be noted in the music you are analyzing, but unless there is a recognizable cadence in the dominant key, do not undertake a detailed analysis.

VIII. Free Composition. [1–*g*] From this time on, the procedure just learned should be applied appropriately in your original compositions whenever opportunity offers.

Sonata, First Movement, Op. 27, No. 2. "Moonlight." Beethoven

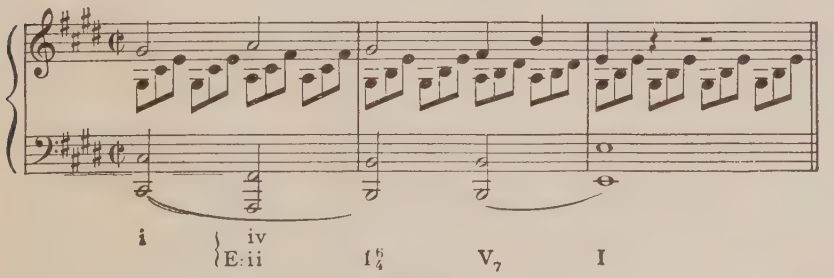



FIGURE 137

STEP TWO. *Modulations to Other Keys by Means of a Common Chord*

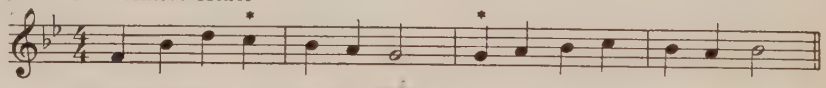
I. Introductory Statement. The procedure described under Step One may be applied in modulating to any key where there is a common chord from which a progression through a definite cadence formula will lead to the tonic triad of the new key. Frequently the common chord will assume the effect of the subdominant of the new key (or one of its substitutes) and will progress to I_4^6 of the new key and thence through the authentic cadence to the tonic, I. Sometimes other common chords will be employed. Often by chromatic alterations, other derived chords may be used for bridging from one key to the cadence of the new key. It is not the purpose of this elementary treatment of the subject of harmony to go deeply into this field of modulation. But a few simple examples are offered in order to give you a clue to the analysis of at least some of the modulations with which you will come in contact in your musical studies and in other familiar music.

II. Harmonic Analysis. [2–*a*] Examples of modulations of the character described in this step will be found in the following well-known pieces of music, which should be thoroughly analyzed, " Fifth Nocturne," Leybach; Turkish March from " Ruins of Athens," Beethoven; " Serenade," Schubert; Miserere from " Il Trovatore," Verdi.

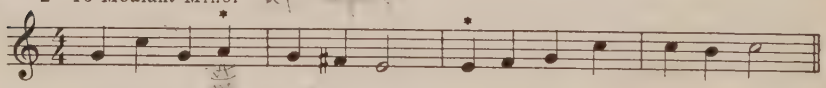
III. Harmonizing Melodies. [II–*b*] *Harmonize the melodies of Exercise 79 in the usual form.* The common chords are indicated by asterisks.

EXERCISE 79.

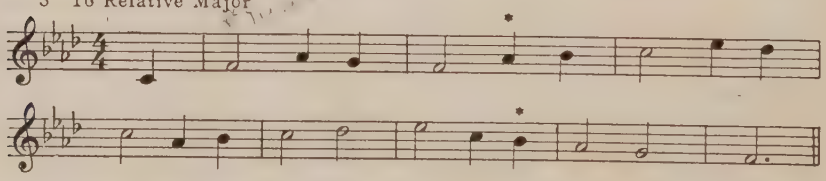
1 To Relative Minor



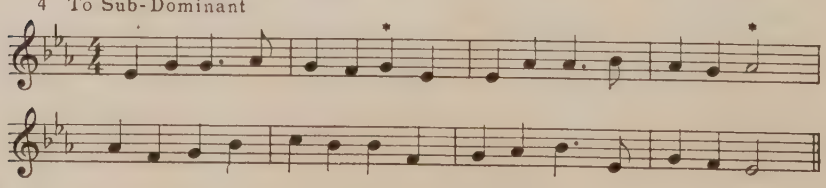
2 To Mediant Minor

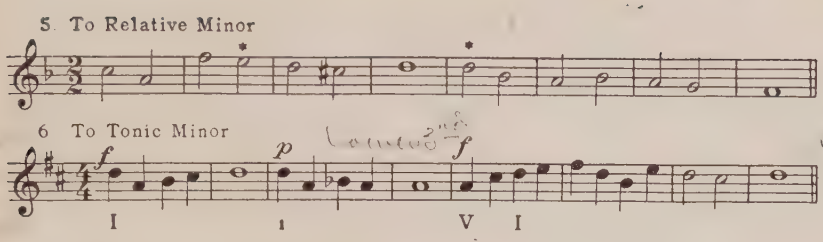


3 To Relative Major



4 To Sub-Dominant





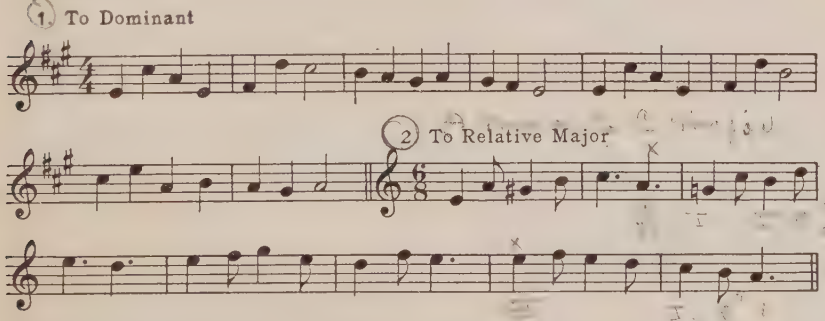
STEP THREE. *Changes of Key without Modulating Passages*

I. Introductory Statement. Quite frequently in the course of a composition a phrase or section will begin in a new key without a previous modulating passage. Usually in such unprepared changes of key the final chord of the previous phrase may be considered a common chord and the harmonic content of the new phrase may be analyzed as a whole within the new key. The following well-known compositions offer examples of such key changes: "Melody in F," Rubinstein; Grand March from "Aïda," Verdi; "Lead Kindly Light," Dykes; etc. The change of key in the Grand March from "Aïda" is startling, but brilliant and most effective.

II. Harmonic Analysis. [3–*a*] An analysis of the following compositions will provide illustrations of the changes of key here discussed: "Melody in F," Rubinstein; "Stars and Stripes Forever," Sousa; "Moment Musicale," Schubert; "La Czarine," Ganne.

III. Harmonizing Melodies. [3–*b*] *The melodies of Exercise 80 are to be harmonized in the usual form.*

EXERCISE 80.



Although no assignment in Melodic Invention is given in this step, you are urged to experiment in changes of key without modulating passages, both in your shorter melodic invention and in your free composition. It is by careful observation of the compositions of great musicians, combined with constant experimentation on your part, that your taste and judgment will be developed.

Hark, Hark, the Lark. Schubert

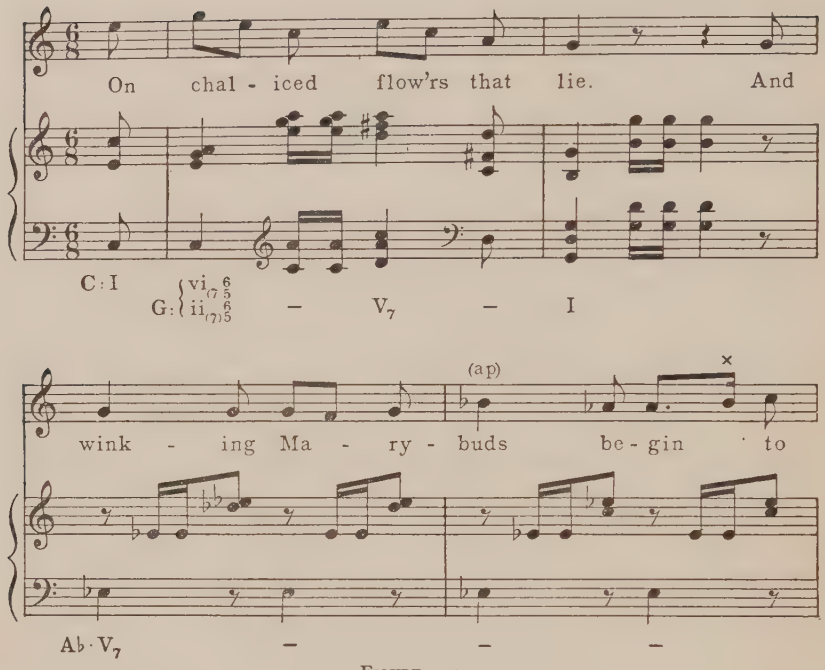


FIGURE 132

STEP FOUR. *Modulation by Means of a Common Tone*

I. Introductory Statement. Among the many means for modulation of which familiar and beautiful examples are common is the change to a key, sometimes only distantly related, by means of a tone common to both keys. As an example we shall quote a few measures from Schubert's "Hark, Hark, the Lark." (See Figure 132.) The common tone, *g*, knits firmly the change from the key of G to the key of A♭. You will readily be aware of the fact that a different key is employed as the composition proceeds. The cadence formulas will enable you to identify the key, and to indicate the chords by the proper marks.

II. Harmonic Analysis. [4-*a*] You will find examples of modulations of the type described in this step in the following compositions, which you are to analyze and mark. "Narcissus," Nevin (enharmonic common tone); "Witches' Dance," MacDowell; "Funeral March of a Marionette," Gounod; Celeste Aïda from "Aïda," Verdi; Bridal Chorus from "Lohengrin," Wagner; "Liebestraum," Liszt; the $\frac{3}{8}$ movement in "Poet and Peasant Overture," Von Suppe.

1st Prelude (Well-Tempered Clavichord). Bach

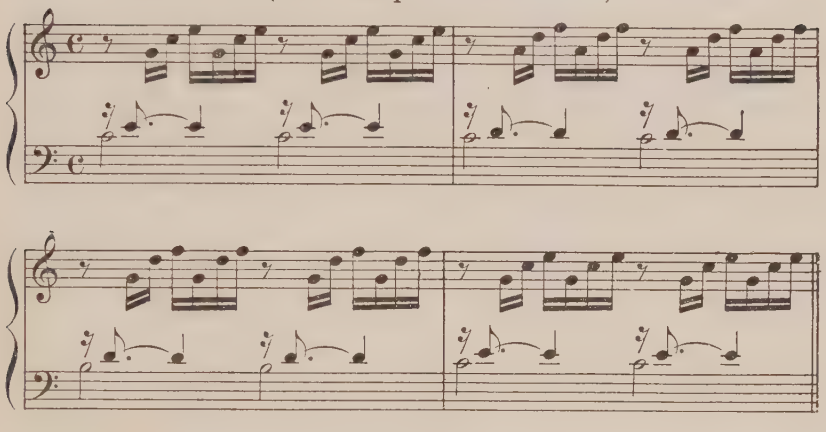



FIGURE 133

CHAPTER EIGHTEEN

THE SEVENTH CHORD ON THE SECOND DEGREE OF THE SCALE

STEP ONE. *In the Fundamental Position, Major*

I. Introductory Statement. By referring to Figure 134 you will find a new chord. The root of this chord is on the second degree of the scale, and the chord is built of four tones as a seventh chord on the second degree. The dimensions from the root upward are as follows: root, minor third, perfect fifth, and minor seventh. Its intervals differ from those of the dominant seventh chord in that its third is minor rather than major. As used in the example quoted in Figure 134 from Godard's Second Mazurka, the function of this chord might be described as a "dominant of the dominant," though the effect is milder than that produced by the dominant chord because of the absence of the sensitive and prominent leading tone. (The first note of the melody in Figure 134 is an appoggiatura, and therefore it is not to be considered as a part of the chord.)

Second Mazurka, Op. 54. Godard

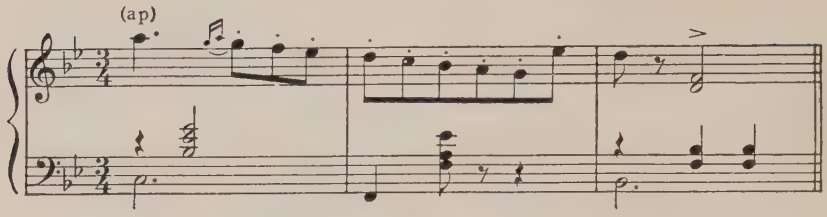


FIGURE 134

In employing this chord for four voices the parts are easily managed. The upper voices move downward, each to its nearest tone in the dominant triad. The bass (the root in this case) moves upward to the root of the dominant triad, if there are no voices obstructing its path. If there are such voices, it may be allowed to move downward. If the new chord proceeds to the dominant seventh chord, the common tone principle will obtain in one upper voice while the others move downward to their nearest objectives.

In order to lead smoothly into the seventh chord on the second degree, the tonic triad should appear in the first inversion, thus avoiding an unpleasant progression of parallel perfect fifths. (See Figure 135 *a* and *b*.) The seventh chord on the second degree may be followed by I^6_4 chord by a simple application of the common tone principle. (See Figure 135 *b*.)

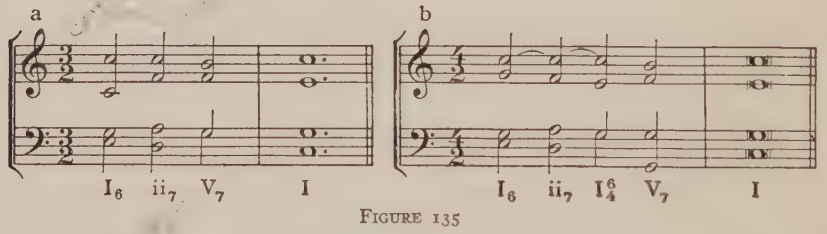
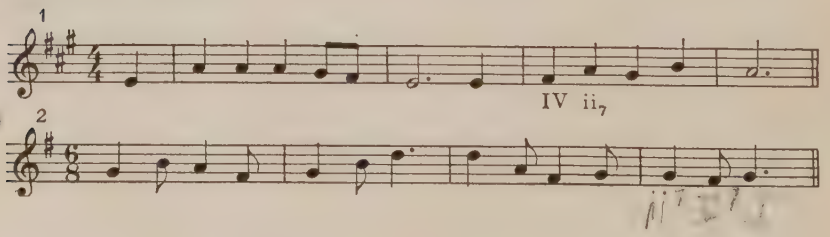



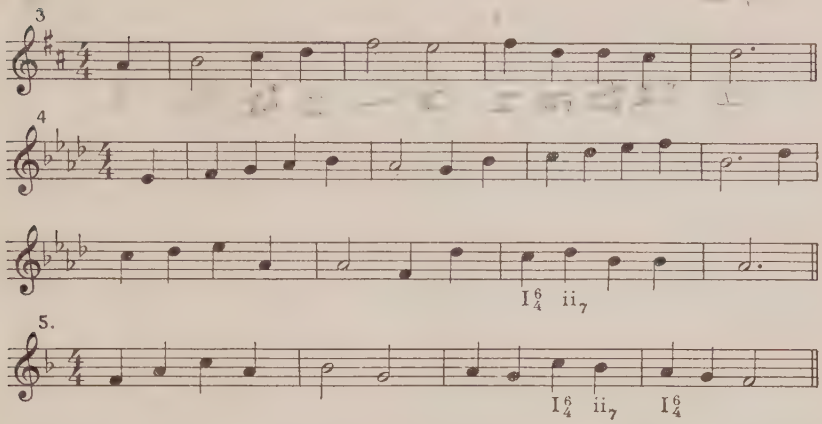
FIGURE 135

II. Chord Building. [1–*a*] *Spell, write, and play the seventh chord on the second degree of the scale in all major keys.*

III. Harmonizing Melodies. [1–*b*] *Harmonize the melodies of Exercise 81 for four voices.*

EXERCISE 81.

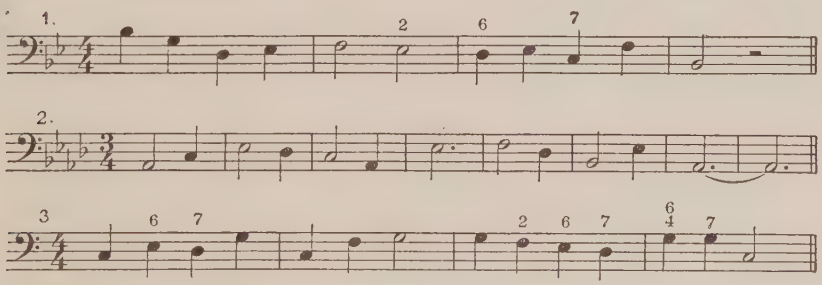




IV. Melodic Invention. [1-*c*] *Invent melodies, using the melody patterns of Chapter Four with the following harmonization, I_6–ii_7–V (or V_7)–I.* If the soprano melody necessitates the doubling of the third in I_6, such doubling is usually quite acceptable. Study the movement of the voices for the avoidance of parallel perfect fifths.

V. Harmonizing Basses. [1-*d*] *Harmonize the basses of Exercise 82 for four voices.*

EXERCISE 82.



VI. Keyboard Harmony. [1-*e*] *Harmonize the following melody patterns at the keyboard in all major keys:* 8–8–7–8, 3–4–2–1†, 5–4–4–3 (or 5–4–2–1†), using the chord progression I_6–ii_7–V (or V_7)–I. *Harmonize the following melody patterns at the keyboard:* 8–8–8–7*–8, 3–3–4–2–3, 5–6–6–5*–5, using the chord progression: I–vi–ii_7–V–I. At (*) occasionally use the V_7 chord.

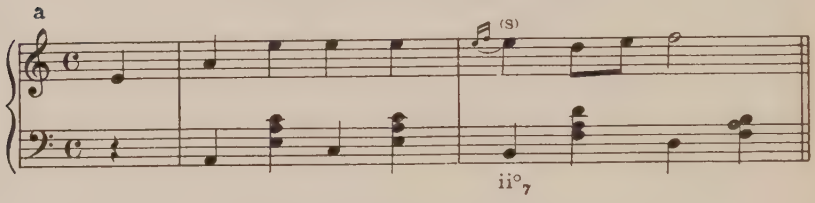
VII. Ear Training. [1 *f*] *Progressions similar to the assignment for keyboard harmony should be used for written and keyboard dictation.*

† In these progressions the seventh of V_7 is most conveniently introduced as a passing tone.

VIII. Harmonic Analysis. [1–*g*] *Find and mark instances of the ii_7 chords in assigned hymns and simple piano compositions.* Among compositions in which this chord will be discovered are the following: "Work for the Night Is Coming," Mason; "Salut d'Amour," Elgar; "Lost Chord," Sullivan; "America, the Beautiful," Ward; Scherzo, "Midsummer Night's Dream," Mendelssohn; Song without Words, No. 32, Mendelssohn.

IX. Free Composition. [1–*h*] An assignment in free composition should be made during the study of this chapter.

La Cinquantaine. Gabriel-Marie



Cecilia. Dykes

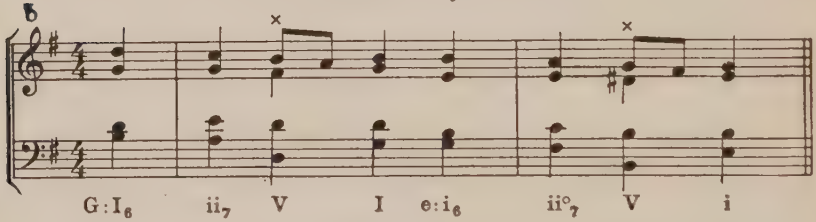


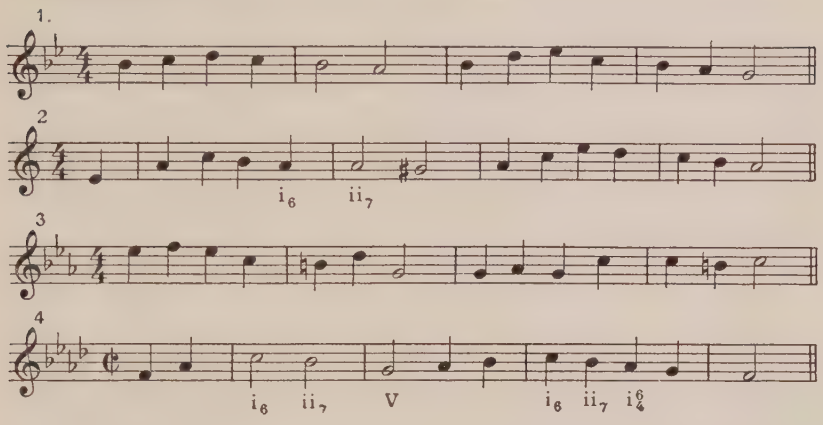
FIGURE 136

STEP TWO. *The ii_7 Chord in the Fundamental Position, Minor*

I. Introductory Statement. Figure 136 offers examples of the seventh chord on the second degree of the scale in minor. This chord differs from the seventh chord on the second degree of the scale in major in that the fifth of the chord is diminished. The intervals of this chord from the root upward, minor third, diminished fifth, and minor seventh, sounding together, produce a very mellow and beautiful effect. As regards voice progressions the chord functions exactly as it does in the major mode. It is indicated by the numeral $ii°_7$.

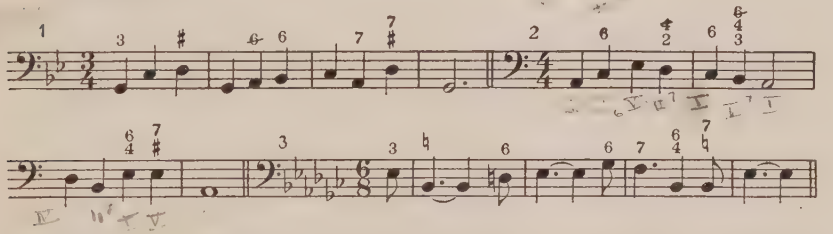
II. Chord Building. [2–*a*] *Spell, write, and play the seventh chord on the second degree of the minor scale in all minor keys.*

III. Harmonizing Melodies. [2–*b*] *Harmonize melodies of Exercise 83, using the seventh chord on the second degree.*

EXERCISE 83.

IV. Melodic Invention. [2–*c*] The melody patterns of Chapter Four transposed to their parallel minor keys may be used with the following harmonization, i_6–$ii^{\circ}{}_7$–V (or V_7)–i. The doubling of the third in i, and some alteration of the melody patterns is permissible.

V. Harmonizing Basses. [2–*d*] *Harmonize the basses of Exercise 84 for four voices.*

EXERCISE 84.



VI. Keyboard Harmony. [2–*e*] *Play the progression i_6–$ii^{\circ}{}_7$–V (or V_7)–i, in all minor keys, to harmonize the following melody patterns: 8–8–7–8, 3–4–2†–1, 5–4–4–3. Play in all minor keys the progression: i–VI—$ii^{\circ}{}_7$–V–i, harmonizing the following melody patterns 8–8–8–7*–8, 3–3–4–2–3, 5–6–6–5*–5.* At (*) occasionally use the V_7 chord.

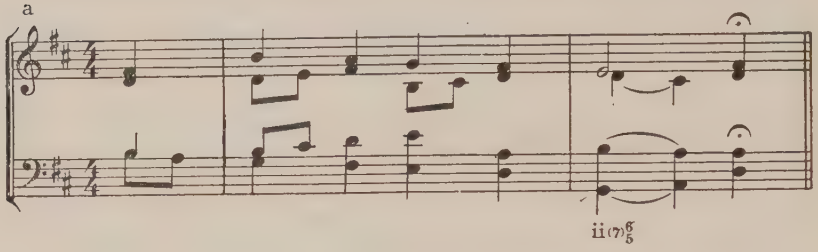
VII. Ear Training. [2–*f*] *Progressions similar to the assignment for keyboard harmony should be used for written and keyboard dictation.*

VIII. Harmonic Analysis. [2–*g*] *Find and mark instances of the $ii^{\circ}{}_7$ chord in minor in assigned hymns and simple piano compositions.* Among compositions in which this chord will be discovered are the following: "Prelude in C♯ minor," Rachmaninoff; "Élégie," Massenet.

† The seventh of V_7 may be introduced as a passing tone.

Passion Chorale. Hassler Harmonized by J. S. Bach

a



Polish Dance. Scharwenka

b

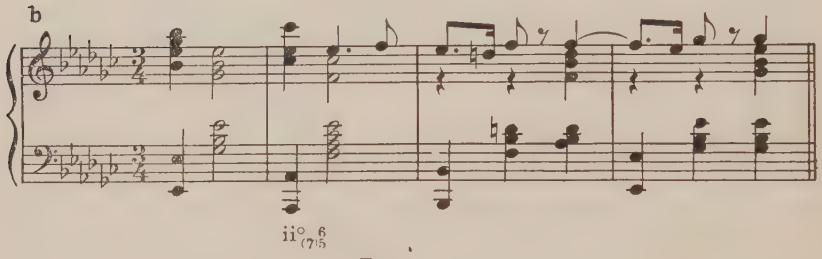


FIGURE 137

STEP THREE. *Inversions of the ii$_7$ Chord*

I. Introductory Statement. Figure 137 presents examples of the ii$_7$ chord in its first inversion, both major and minor. The fourth tone of the scale appears as the bass tone of the chord, thereby giving it a distinct subdominant effect. In its first inversion this chord may be considered a rich substitute for the subdominant triad. The voice movements are easily managed in both major and minor by applying the common tone principle in the voice where it is appropriate and by moving the other voices to their resolutions by the shortest route.

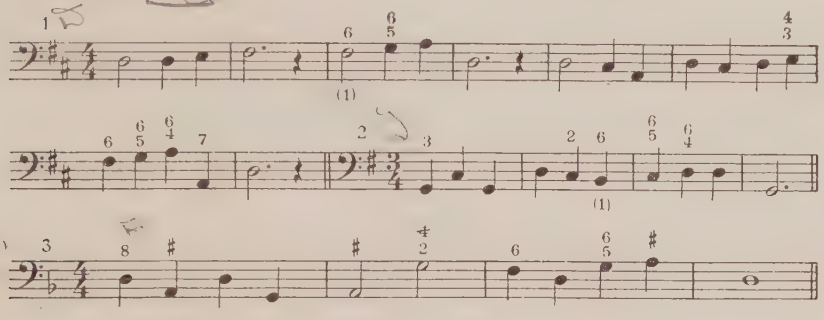
II. Chord Building. [3–*a*] *Spell, write, and play the first, second, and third inversions of the seventh chord on the second degree of the scale in all major and minor keys, following each by V–I (or V$_7$–i).*

III. Harmonizing Melodies. [3–*b*] The melodies of Chapter Four may be harmonized by the use of the progression I-ii(7) 6/5-V (or V$_7$)–I. The same melodies may also be harmonized in minor by transposing them to the parallel minor keys. The melodic pattern 3–4–2–3 of Chapter Four should in this step be changed to 3–2–2–3 or be harmonized with ii$_7$ uninverted.

IV. Melodic Invention. [3–*c*] Melodies appropriate for harmonizing with the first inversion of the seventh chord on the second degree may be invented by using the melody patterns of Chapter Four.

V. Harmonizing Basses. [3–*d*] *Harmonize the basses of Exercise 85 for four voices.*

EXERCISE 85.



(1) Double the third of these chords.

VI. Keyboard Harmony. [3–*e*] *The following melody patterns are to be harmonized at the keyboard.* In all these exercises use the chord progression I–ii($_7$) $\frac{6}{5}$–V (or V$_7$)–I. The melody patterns are 1–1–7–1, 3–2–2–1 (or 3–2–2–3), and 5–6–5–5. The V$_7$ chord may follow V by the melodious movement of one voice: 5–4–3, as in Figure 119. Use the chord progression I–ii($_7$)$\frac{6}{5}$–I$\frac{6}{4}$–V (or V$_7$)–I with the following melody patterns, 1–1–1–7–1 3–2–3–2–1, 5–6–5–4–3.

VII. Ear Training. [3–*f*] *Progressions similar to the assignment for keyboard harmony should be used for written and keyboard dictation.*

VIII. Harmonic Analysis. [3–*g*] *Find and mark instances of the ii chords in assigned hymns and simple piano compositions.* Among compositions in which this chord will be discovered are the following: "St. Leonard," Henry Hiles; Song without Words, No. 44, Mendelssohn; Sonata, Op. 27, No. 2, first movement, Beethoven; "Nashville," adapted by Lowell Mason; "Serenade," Schubert. (See also Figure 21.)

Figures 133 and 138 illustrate other inversions of the seventh chord on the second degree. After studying these examples, look through the written work of this chapter completed thus far to find opportunities to use these inversions. The following simple rule will help in locating such places: An inversion should seldom be used at places where the bass tone appears in the soprano (this principle is not always carried out by the great composers, who sometimes double the bass tone, especially when bass and soprano progress in contrary motion). However, it would be well for the present that you observe the rule to avoid doubling the bass tone. By carefully analyzing the works of great composers and studying the way in which they use the material of composition, you can best learn how to employ chords most effectively in your own compositions.

Sonata, First Movement, Op. 27, No. 2. "Moonlight."
Beethoven

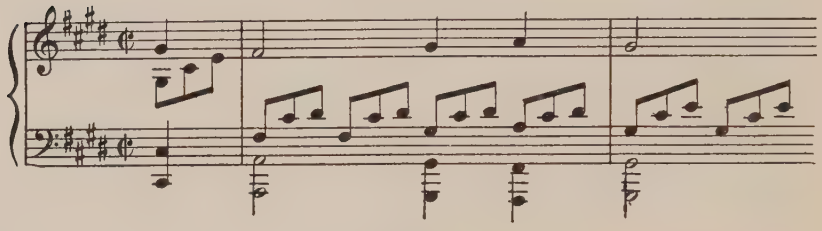



FIGURE 138

The following melody patterns are appropriate for harmonizing by the use of I–ii$_{(7)}$ $\frac{4}{3}$–V (or V$_7$)–I: 1–1–7–1 and 3–2–2–3 (or 3–2–2–1). The following melody patterns are appropriate for use with the chord ii$_{(7)}$2: 1–2–2–1, 3–2–2–1, and 3–4–4–3 harmonized by I–ii$_{(7)}$$\frac{4}{2}$–V$_{(7)}$$\frac{6}{5}$–I. [3–*h*.] *Write and play these progressions in all major and minor keys.*

Sonata, First Movement, Op. 27, No. 2. "Moonlight."
Beethoven

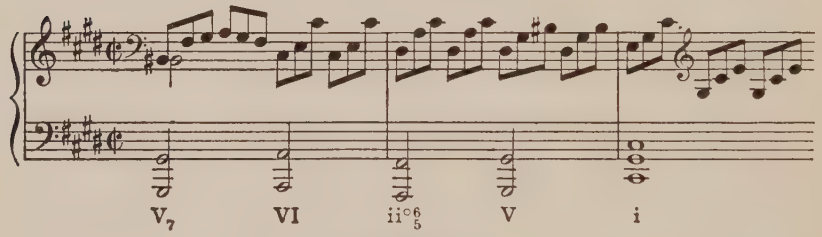



FIGURE 139

STEP FOUR. *The Progression vi–ii$_7$*

Figure 139 illustrates the use of the ii$_7$ chord preceded by a triad on the sixth degree. This progression produces a varied and pleasing effect. The following melody patterns are interesting for experimenting with the progression I–vi–ii$_{(7)}$ $\frac{6}{5}$–V (or V$_7$)–I: 8–8–8–7–8, 5–6–6–5–5, 3–3–2–2–3 (or 3–3–2–2†–1).

† With the seventh of V$_7$ appearing as a passing tone.

Hark, Hark, the Lark. Schubert

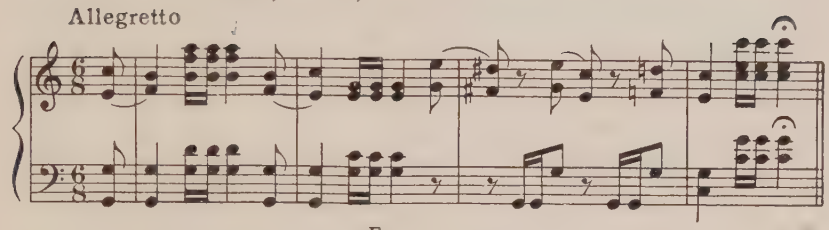


FIGURE 140

CHAPTER NINETEEN

CHORDS CONTAINING THE SEVENTH AND SIXTH TONES OF THE SCALE SIMULTANEOUSLY

STEP ONE. *The Dominant Ninth Chord*

I. Introductory Statement. Reference to Figure 140, the fifth measure of the introduction to Schubert's "Hark, Hark, the Lark," shows a chord of five different tones, built of intervals of thirds, with the dominant tone of the key as the root: *g*, *b*, *d*, *f*, *a* (5–7–2–4–6 of the scale). A study of the chord reveals that the lower four tones form the dominant seventh chord, and that the new tone is a major ninth from the root and a major third from the seventh of the chord. This new chord is called the *dominant ninth chord*, and is a rich and colorful chord. Indeed its richness has led to such abuse and over-use in modern popular and jazz music that the effect of the chord has become a commonplace.

In four-part music the fifth of the chord (2 of the scale) is usually the tone to be omitted.

The tones of the dominant ninth chord resolve as in other chords in which these scale tones occur: 5–5, 7–8, 2–3 (avoiding parallel fifths), 4–3, 6–5; the bass, 5–1.

The dominant ninth chord in minor is especially beautiful; so beautiful, indeed, that composers frequently employ this effect even in major keys. Figure 141 gives a familiar example of this chord. The leading of voices in using the dominant ninth chord in minor is similar to the progression in major, suggested above. Dominant ninth chords in both major and minor keys frequently resolve to the dominant seventh chord by the progression of the ninth one scale step downward. (See Figure 141.)

Anitra's Dance, Peer Gynt. Grieg

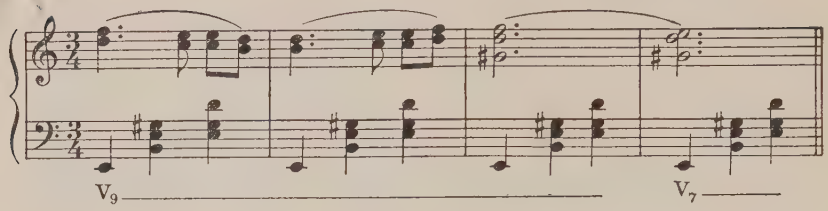


FIGURE 141

II. Chord Building. [1–*a*] *Spell, write, and play the dominant ninth chord in all major and minor keys, resolving correctly into the tonic triad.*

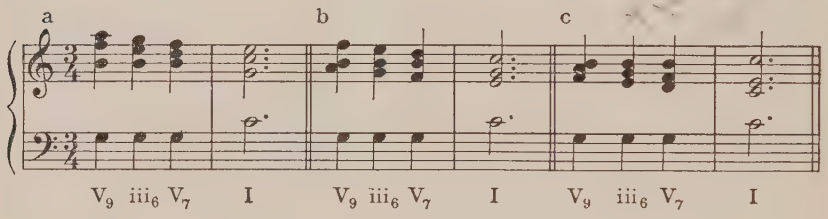



FIGURE 142

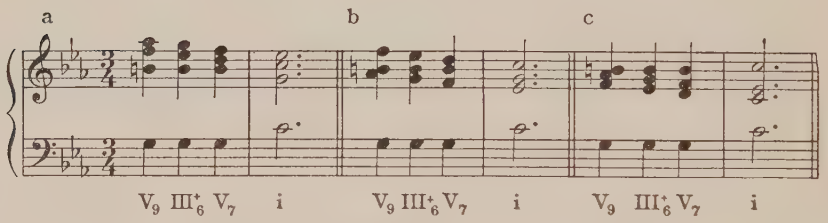



FIGURE 143

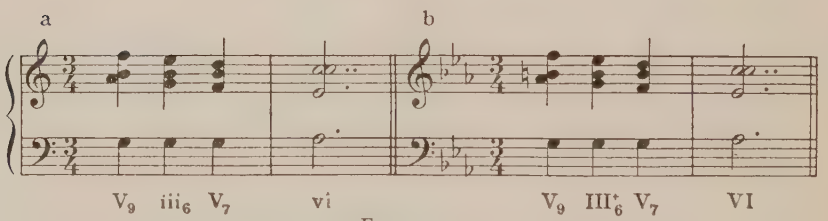


FIGURE 144

III. Keyboard Harmony. [1–*b*] Figure 142 *a*, *b*, and *c* gives three examples of a frequently used resolution of the dominant ninth chord in major, and Figure 143 *a*, *b*, and *c* shows the same resolution in minor. *Play these progressions in all major and minor keys.* An excellent variant is the close of this cadence with the chord on the sixth degree, although you must

be careful to avoid the use of parallel consecutive fifths and the movement of a voice over the interval of an augmented second. (See Figure 144 *a* and *b*.)

IV. Harmonic Analysis. [1–*c*] *Find and mark examples of the dominant ninth chord in major and minor keys.* Among the familiar compositions in which this chord occurs the following may be mentioned: "Pomp and Circumstance," Elgar (begin at measure 222); "Liebestraum," Liszt; "Narcissus," Nevin; "Moonlight" Sonata, first movement, Beethoven.

Hallelujah Chorus, from "The Messiah." Handel

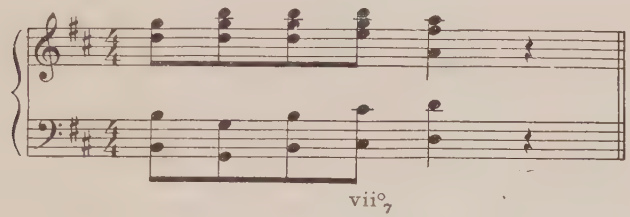


FIGURE 145

STEP TWO. *The Seventh Chord on the Leading Tone in Major Keys*

I. Introductory Statement. Figure 145 gives an illustration of this chord from a familiar composition, Handel's "Hallelujah Chorus." You will readily perceive that this chord consists of the upper four tones of the dominant ninth chord in major; that it is in fact the same chord with the root omitted. Some theorists prefer to consider it in this light. We shall consider it as the seventh chord on the leading tone, vii°7. Should you desire to use this chord in your original compositions, study each appearance carefully to make sure that the seventh and third of the chord do not produce parallel perfect fifths in their movement. The third should move upward one step, or to the dominant tone of the key if below the seventh.

Farewell to the Forest. Mendelssohn

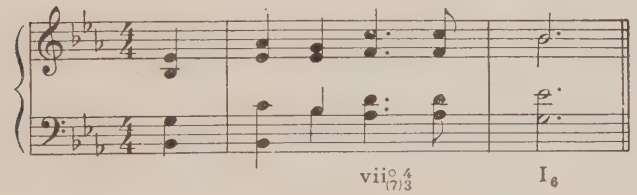



FIGURE 146

II. Harmonic Analysis. [2–*a*] The chord is not uncommon in modern music, especially in inversions. Examples will be found in two well-known

compositions, Mendelssohn's part song, "Farewell to the Forest," and MacDowell's "To a Wild Rose." *Try to find other examples of this chord.*

Toreador's Song, from "Carmen." Bizet

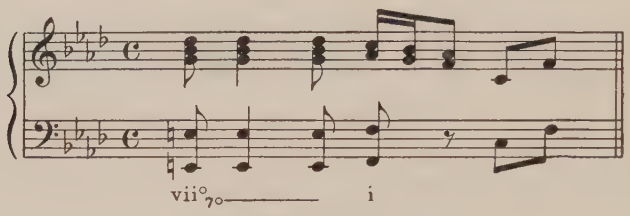


FIGURE 147

STEP THREE. *The Seventh Chord on the Leading Tone in Minor Keys*

I. Introductory Statement. Figure 147 gives an example of this extraordinarily useful chord, the Introduction to the Toreador's Song from "Carmen," by Bizet. The suggestions given for the use of the ii°7 chord in major keys can be applied profitably to the chord as it appears in minor keys, where it is indicated by the figured numeral vii°7o.

The chord consists of the tones of the dominant ninth chord in minor, with the root omitted. The root of the chord we are now studying is on the seventh tone of the scale, and its tones produce the following intervals, counting from the root upward: minor third, diminished fifth, diminished seventh. Observe also that all the adjacent tones of this chord have the same interval relationship, *i.e.*, a minor third. A seventh chord containing these intervals is called a *diminished seventh chord*, and when the root is the leading tone, is designated by the symbol vii°7o.

Because of its peculiar and noncommittal dissonance this chord is much employed by composers for expressive purposes.

Overture, "Tannhäuser." Wagner

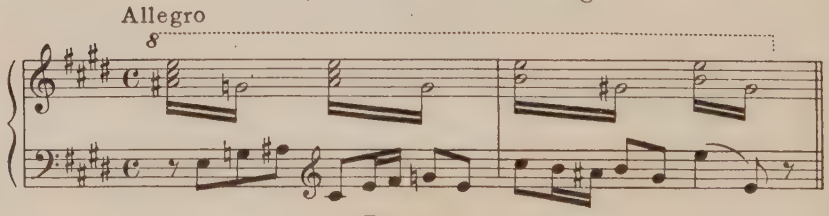


FIGURE 148

The chord is extremely useful in modulations by means of one or more common tones, because it is easy in this way to modulate from any key into practically all other major or minor keys. (See Figure 148.) A modulation

can be effected instantly to any one of four dominant seventh chords by lowering a half-step any tone of the vii°$_{7}$ chord.

Composers do not hesitate to employ this chord in major keys by altering the necessary tones by means of chromatics. Such effects fall into the category of Borrowed Chords (Chapter XX) rather than modulation. The chord readily appears in all inversions.

Andante from Fifth Symphony. Beethoven

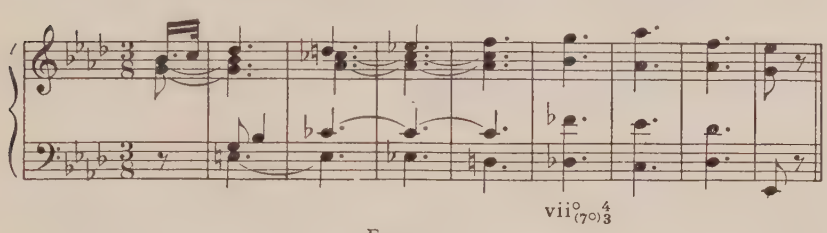



FIGURE 149

II. Harmonic Analysis. [3–*a*] Examples of the diminished seventh chord are readily found, especially in dramatic music. *Discover and mark the chord in Figure 149 and also in the following and in other compositions:* Scherzo from "Midsummer Night's Dream," Mendelssohn; "Witches' Dance," MacDowell; Sonata No. 5, Op. 10, No. 1, first movement, Beethoven; "Prelude in C♯ Minor," Rachmaninoff.

Celeste Aïda, from "Aïda." Verdi

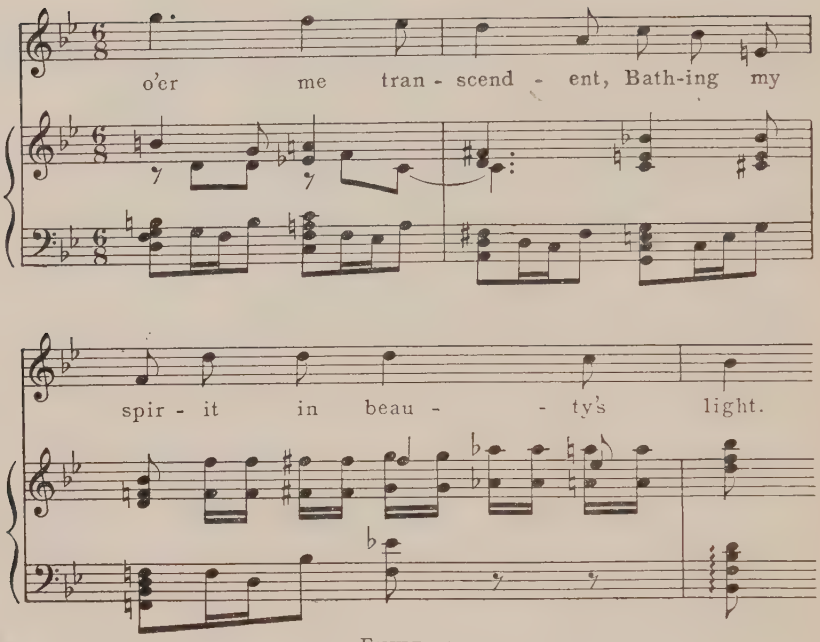


FIGURE 150

CHAPTER TWENTY

BORROWED CHORDS

The topics of this chapter are not intended for formal treatment. They are designed to assist you in your analysis of familiar music, and also to suggest harmonic procedure of an interesting character which you may employ in your own creative work. Study carefully the illustrations suggested, for they will open a rich vein of harmonic material.

O Sole Mio! Di Capua

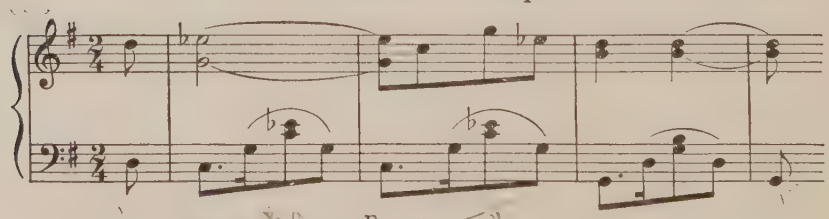


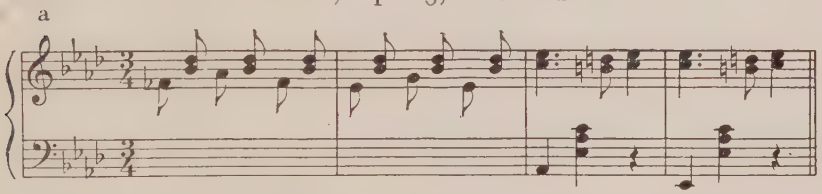
FIGURE 151

STEP ONE. *The Subdominant Triad Borrowed from the Tonic Minor Key*

Figure 151 illustrates this effective chord, which is not uncommon in well-known compositions. [1–*a*] *Find an example in Rubinstein's "Melody in F."* Another illustration may be found in Liszt's "Liebestraum." Additional material for analysis: Mendelssohn's "Songs without Words," Nos. 15, 44, 46, 47, 49; near the close of the overture, "The Merry Wives of Windsor," Nicolai; and the Scherzo, "Midsummer Night's Dream," Mendelssohn.

The opposite effect, a very striking one, is the subdominant triad borrowed from the tonic major key, an example of which occurs with intense dramatic effect in the tenor solo in the Prelude to Mascagni's "Cavalleria Rusticana."

Valse, Op. 83, Durand



Overture, "The Merry Wives of Windsor." Nicolai

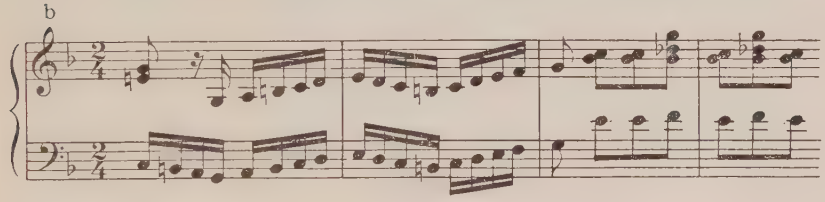



FIGURE 152

STEP TWO. *The Seventh Chord on the Second Degree Borrowed from the Tonic Minor Key*

This effect is not unlike the effect described in Step One, above. Two illustrations are shown in Figure 152. [2–*a*] *Find this effect in Mendelssohn's "Songs without Words," Nos. 4 and 49; also in the Scherzo of Mendelssohn's "Midsummer Night's Dream."*

Funeral March of a Marionette. Gounod

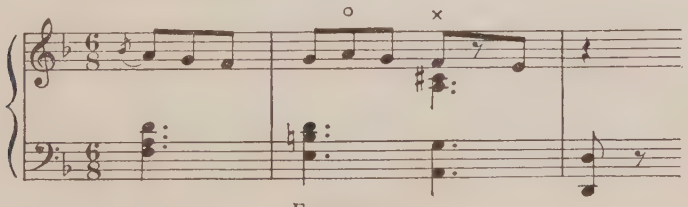
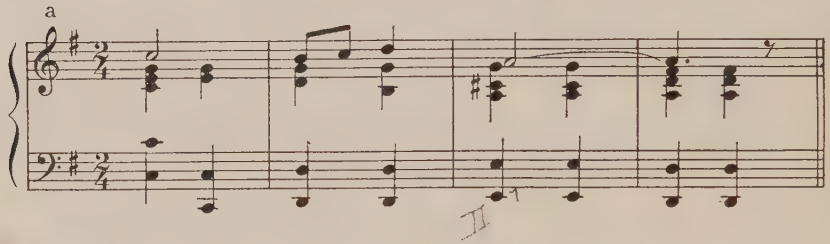


FIGURE 153

The opposite effect, the seventh chord on the second degree borrowed from the tonic major key, is happily illustrated in Figure 153. Observe that this borrowed chord makes possible the effect of the ascending upper tetrachord of the melodic minor scale.

Pomp and Circumstance, No. 1. Elgar

a



Pilgrims' Chorus, from "Tannhäuser." Wagner

b

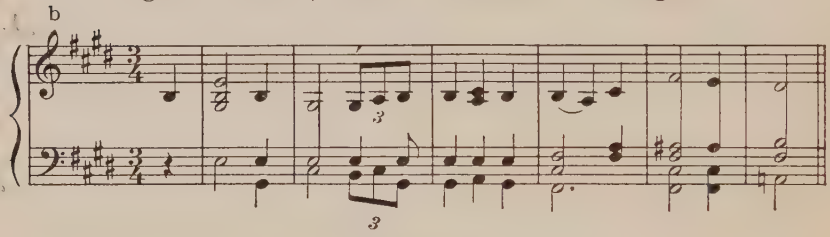


FIGURE 154

STEP THREE. *The Dominant Seventh Chord Borrowed from the Dominant Key*

This chord is probably the most frequently used of all borrowed chords. It occurs in all inversions. You will have no difficulty finding many examples of this chord. (See Figure 154 *a* and *b*. See also Figure 9 *a*.)

[3–*a*] *Find additional examples in Mendelssohn's "Songs without Words," Nos. 1, 24, 28, 30, 31, 41, 42, 44, 45; also the Scherzo from Mendelssohn's "Midsummer Night's Dream."*

Andante and Rondo Capriccioso. Mendelssohn

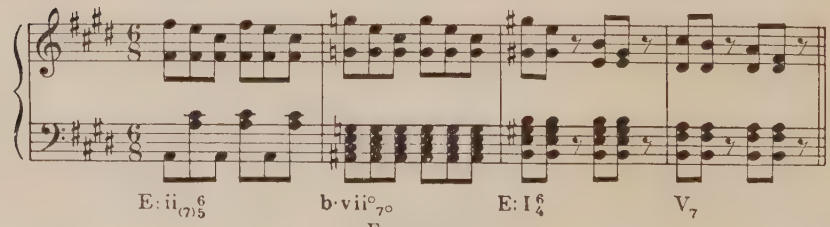
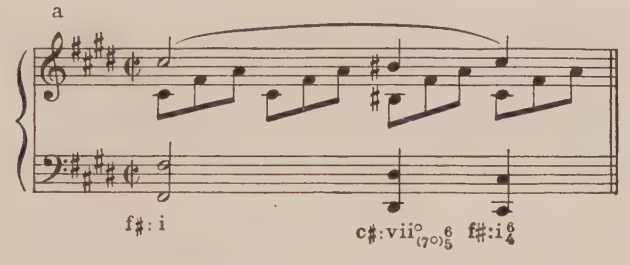



FIGURE 155

STEP FOUR. *The Tonic Six-Four Chord of Major or Minor Keys preceded by a Diminished Seventh Chord containing Sharp-Four of the Scale*

This progression is illustrated in Figure 155. It occurs frequently in familiar music, and in a large variety of forms. (See Figure 156.)

Sonata, First Movement, Op. 27, No. 2. "Moonlight." Beethoven

Sextette from "Lucia." Donizetti

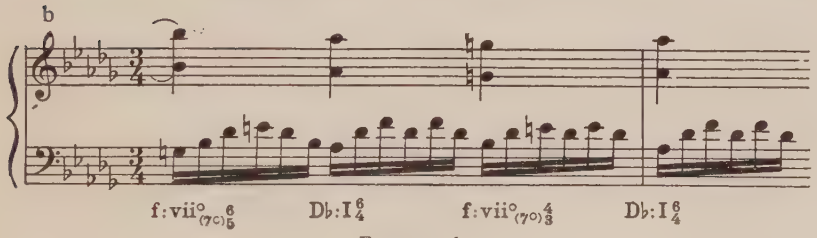



FIGURE 156

[4–*a*] *Find examples of this effect in "Last Night" by Kjerulf; "In Old Madrid," by Trotere; and in piano compositions.* An interesting example occurs in "Der Freischütz" Overture, by Von Weber. Additional material for analysis: Mendelssohn's "Songs without Words," Nos. 26, 29; Scherzo in E minor, Mendelssohn; second movement of Beethoven's Sonata, op. 27, No. 2 ("Moonlight").

STEP FIVE. *A Dominant Seventh Chord Built upon Various Other Tones of the Scale*

[5–*a*] In the well-known hymn tune, "St. Leonard," quoted as Figure 157, you will discover borrowed dominant seventh chords on 1, 2, 3, and 6 of the scale, in addition to other interesting harmonies which will repay analysis. (See also Figures 8, 66, and 146.) Interesting consecutive dominant seventh chords will be found in Figure 150.

St. Leonard. Henry Hiles

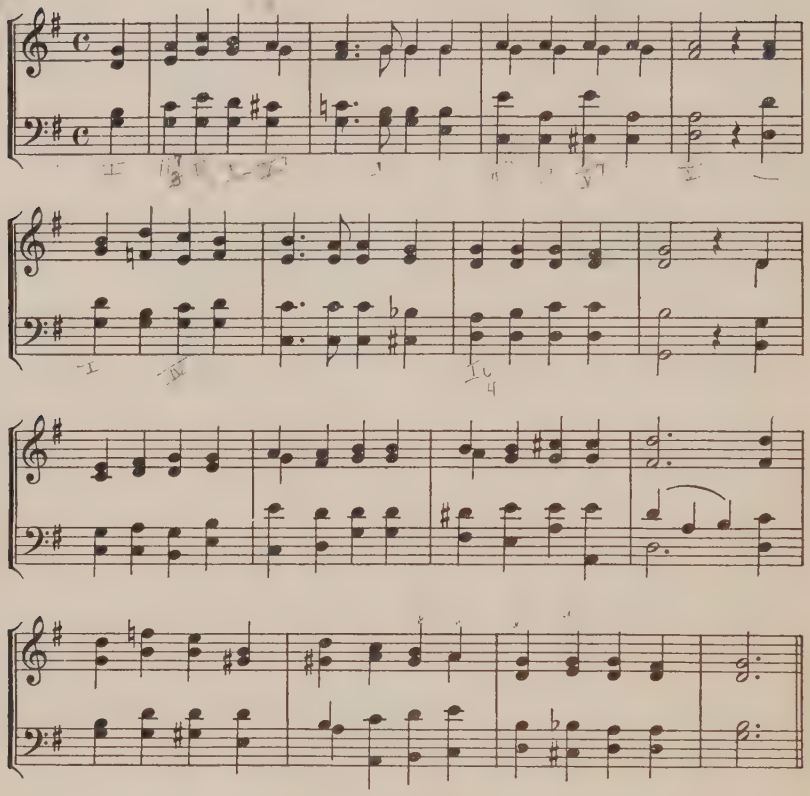


FIGURE 157

STEP SIX. *Other Borrowed Chords*

Other examples of borrowed chords have appeared from time to time in the illustrative material of this book. [6-*a*] *See whether you can analyze all the chords and non-harmonic tones in Figure 157.*

CONCLUDING STATEMENT

This brief course in elementary harmony has attempted to touch upon obvious harmonic material and progressions only. There are many beautiful and effective chords and non-harmonic effects which you will meet in familiar music that have been omitted from our consideration. In their technical aspects these effects belong to advanced rather than elementary harmony. Your studies have prepared you, especially under the guidance of an experienced musician, to undertake a rather detailed analysis of certain familiar compositions of rich harmonic structure, and we would suggest the

following for your careful study: Sonata, Op. 27, No. 2 ("Moonlight"), Beethoven; "Largo," Handel; Pastoral Symphony from "The Messiah," Handel; First Prelude from the Well-Tempered Clavichord, Bach; Scherzo from "Midsummer Night's Dream," Mendelssohn; "Träumerei," Schumann; and especially the various piano compositions which you are studying in your piano lessons. A thorough analysis of several of the "Songs without Words" will be most valuable.

If you have enjoyed and profited by your study of this book, you will doubtless wish to pursue the subject into its more advanced aspects.

APPENDIX

SUGGESTIONS FOR TEACHERS

HARMONY has been called the grammar of music. It could also be happily styled the chemistry of music, especially as it is a progressive science revealing in its newer aspects reactions and formulas which were undreamed of in former times. Notwithstanding this progressive and evolutionary aspect, there are certain principles and formulas, some of them derived from nature, which the beginner must know in order to make substantial progress in the mastery of the science. It is the purpose of this book to set forth these principles in progressive order, balancing various grades of difficulty with progressive grades of utility, and to present them in several different approaches, with a certain amount of drill in each. To this end it seems advisable to make certain suggestions to the teacher as to procedure in presenting and drilling upon the material in this book.

The suggestions will be discussed under the following headings:

1. **Succession of Topics**
2. **Procedure in Presenting Topics**
3. **Outline of work**

1. Succession of Topics

The succession of topics is based upon progressive degrees of usefulness of the various chords.

A. Each chord is studied individually, and is a completely developed topic in itself. This procedure is intentionally a slow one, but experience has proved it to be thorough.

B. The names and functions of the tools of any craft need not be made known to the novice until he meets a problem actually requiring their use, and in the present course no topic is studied until the student is ready to apply it in his harmonization. For example, interval study does not occur in this book until the contrasting of the major and minor makes a technical terminology necessary.

C. Music with which any student is familiar contains many modulations and non-harmonic tones. Their presence in music is so simple and natural that we feel it desirable for the student to recognize them. These topics, therefore, have been introduced early, in order that the student may relate his studies with familiar music.

D. The study of cadences and idiomatic harmonic formulas is emphasized throughout as a means by which the student can develop a feeling for natural chord successions. This emphasis has led to a somewhat unusual procedure in the succession of topics; as, for example, the early treatment of the tonic chord in the second inversion as an essential part of a closing cadence.

2. Procedure in Presenting Topics

THE BLIND MEN AND THE ELEPHANT

1. It was six men of Indostan
To learning much inclined,
Who went to see the elephant
(Though all of them were blind),
That each by observation
Might satisfy his mind.

2. The First approached the elephant,
And happening to fall
Against his broad and sturdy side,
At once began to bawl:
"God bless me! — but the elephant
Is very like a wall!"

3. The Second, feeling of the tusk,
Cried: "Ho! — what have we here
So very round and smooth and sharp?
To me 'tis mighty clear
This wonder of an elephant
Is very like a spear!"

4. The Third approached the animal,
And happening to take
The squirming trunk within his hands,
Thus boldly up and spake:
"I see," quoth he, "the elephant
Is very like a snake!"

5. The Fourth reached out his eager hand,
And felt about the knee.
"What most this wondrous beast is like
Is mighty plain," quoth he;
"'Tis clear enough the elephant
Is very like a tree!"

6. The Fifth, who chanced to touch the ear,
Said: "E'en the blindest man
Can tell what this resembles most,
Deny the fact who can,

This marvel of an elephant
Is very like a fan!"

7. The Sixth no sooner had begun
About the beast to grope,
Than, seizing on the swinging tail
That fell within his scope,
"I see," quoth he, "the elephant
Is very like a rope!"

8. And so these men of Indostan
Disputed loud and long,
Each in his own opinion
Exceeding stiff and strong,
Though each was partly in the right,
And all were in the wrong!

John G. Saxe's familiar poem points in a humorous but forceful way the moral for the teaching of harmony that provides an all-round approach.

The authors of "An Approach to Harmony" have taken to heart the moral of Saxe's poem, and have endeavored to emphasize six different approaches which together should be pursued in the study of each topic if the student is to get a clear conception of the topic as a whole. It is highly important that the procedure be strictly followed. First, of course, where a particular chord is the topic of the lesson, that chord becomes the subject for drill in chord building, wherein the student spells, writes, and plays chords in their simplest form, mastering thoroughly the principles of their construction, and acquainting himself with their effect as isolated musical entities.

These six approaches to the topics of the course are:

1. **Harmonizing Melodies.** The student here works with both paper and keyboard, sometimes only with the latter. To assist him in forming correct judgment in the choice of chords, certain "melody patterns" are set forth with a specified harmonization for each. Melodies for harmonization are provided which include these patterns. This device is considered by the authors to be a special feature of the book.
2. **Melodic Invention.** After completing the harmonization of the melodies printed in the book in connection with a certain problem, the student invents similar melodies of his own, including the melody patterns of the problem under consideration.
3. **Harmonizing Basses.** This academic exercise, though not having the prestige once given to it, is nevertheless very important. A student whose imagination begins to picture the bass part is on the way to becoming a harmonist. Certain of the bass melodies are designed to give the student some opportunity for the exercise of judgment in inventing the melodic and harmonic superstructure.

4. **Keyboard Harmony.** The problem of each step, developed through practice in Harmonizing Melodies, Melodic Invention, and Harmonizing Basses, becomes a topic for drill at the piano keyboard. Keyboard facility in harmonic material is of the greatest value in training the ear in the recognition of chords and their progressions, in providing a background for ready sight reading, and in stimulating the musical imagination by making readily available a vocabulary of correct and natural chord progressions.
5. **Ear Training and Dictation.** The cultivation of melodic and harmonic memory is a step toward the cultivation of tonal and harmonic imagination. The student responds to the dictation of the teacher by singing, writing, or playing.
6. **Harmonic Analysis.** In a sense this topic may be said to both begin and end each chapter in that each chapter begins with a motto quotation from a well-known composition illustrating the topic, and closes with a formal exercise in analysis, sometimes with a specific composition designated as the subject. The application of analysis to familiar music provides an invaluable apperceptive basis for the mastery of harmony. In order to assist the teacher to find additional material for analysis in a simple and readily available form, we present on page 173 a list of Mendelssohn's "Songs without Words," in which the student will find illustrations for particular topics.

In working out these approaches care has been taken to suggest the instruction through positive rather than negative directions. All of the exercise material is written so that there will be little occasion for prohibitions or negative instruction when these directions are consistently followed. For instance, the usual rules forbidding parallel fifths and octaves do not appear except as cautionary statements late in the course. The exercise material is so constructed that the student will not violate such rules if directions are followed.

Throughout the book brief excerpts from familiar compositions are used as illustrative material. Through them the student relates his studies to actual music with which he is familiar. In order that this relationship may have full value, the teacher is advised to have available the entire selection from which the illustration has been taken. By hearing the point illustrated in its complete context the student will be enabled to observe the manner in which a great composer treats it. It is further advised that reproducing piano rolls and talking machine records of these compositions should be heard.

An important feature of the course is the requirement that the student shall submit an original composition from time to time. This is called **Free Composition.** This designation is used to mean that the student shall write

music which interests him musically, without feeling the restrictions of technical rules. His technical studies cannot fail to show their influence, and where previous instructions have been violated, the teacher can point out the desirable revisions. The real purpose of the assignment, however, is to lead the student to musical thinking, and to make his compositions self-expressive rather than merely formal. In this field the teacher's province is to sense the student's intention and to suggest ways by means of which it may be realized.

3. Outline of Work

The following outline is organized into four divisions. The course as a whole may be given in two years, each division representing two lessons per week for a half year. In schools where there is a daily lesson in harmony, the course can be covered in one year, each division representing a quarter of a year. In the daily plan for one year, the home assignments must necessarily be shorter, but the same ground is covered because of the additional recitations. There are 120 lessons in all. This makes ample allowance for the interruptions by holidays, examinations, vacations, and reviews. While there will not be an equal amount of work assigned in each lesson, this flexibility of assignments will give the student extra time to spend on free composition and the musical analysis of compositions which illustrate the points he is studying.

First Year, First Semester

Planned for Thirty Lessons

Lesson No.	
1–7	Introduction. A review of elementary theory essential for the first lessons in harmony.
	Chapter One. **The Tonic Triad**
8	Step One
9	Step Two
10	Step Three
11	Step Four
12–13	Steps Five, Six, and Seven
14	Step Eight. Including assignment of an original composition.
	Chapter Two. **The Dominant Triad**
15–16	Step One
17	Step Two
18	Step Three
19–20	Step Four. Including assignment of an original composition.
	Chapter Three. **The Subdominant Triad**
21	Step One
22	Step Two

Lesson No.

23 Step Three
24–25 Step Four. Including assignment of an original composition.

Chapter Four. **The Progression IV–V**

26–27 Step One
28 Step Two
29–30 Step Three. Including assignment of an original composition.

First Year, Second Semester

Planned for Thirty Lessons

Chapter Five. **The Minor Mode**

1 Step One
2 Step Two
3–4 Step Three. Including assignment of an original composition.

Chapter Six. **The Minor Mode** (*Continued*)

5 Step One
6 Step Two
7 Step Three
8–9 Step Four. Including assignment of an original composition.

Chapter Seven. **Intervals**

10 Step One and Step Two
11 Step Three
12–13 Step Four
14 Step Five. Including assignment of an original composition.

Chapter Eight. **Open Harmony**

15 Step One
16–17 Step Two
18–20 Step Three. Including assignment of an original composition.

Chapter Nine. **Non-Harmonic Tones**

21 Step One
22 Step Two
23 Step Three
24 Step Four
25 Step Five
26 Step Six
27–28 Step Seven
29–30 Step Eight. Including assignment of an original composition.

Lesson No.

Second Year, First Semester

Planned for Thirty Lessons

Chapter Ten. **The Second Inversion of the Tonic Triad in Cadences**

1–2 Step One
3 Step Two
4–5 Step Three. Including assignment of an original composition.

Chapter Eleven. **The Dominant Seventh Chord**

6–7 Step One
8 Step Two
9 Step Three and Step Four
10–11 Step Five. Including assignment of an original composition.

Chapter Twelve. **Inversions of the Tonic Triad**

12–13 Step One
14–15 Step Two. Including assignment of an original composition.

Chapter Thirteen. **Inversions of the Dominant and Subdominant Triads**

16–17 Step One
18–19 Step Two
20–21 Step Three. Including assignment of an original composition.

Chapter Fourteen. **Inversions of the Dominant Seventh Chord**

22–24 Step One. Including assignment of an original composition.

Chapter Fifteen. **Non-Harmonic Tones in the Bass and Inner Voices**

25–27 Step One
28–30 Step Two. Including assignment of an original composition.

Second Year, Second Semester

Planned for Thirty Lessons

Chapter Sixteen. **Secondary, or Substitute Triads**

1–2 Step One
3–4 Step Two
5–6 Step Three
7–8 Step Four
9–10 Step Five. Including assignment of an original composition.

Chapter Seventeen. **Modulation**

11–12 Step One
13 Step Two
14 Step Three
15–16 Step Four. Including assignment of an original composition.

LESSON NO.

Chapter Eighteen. **The Seventh Chord on the Second Degree of the Scale**

17–18 Step One
19 Step Two
20–21 Step Three
22 Step Four. Including assignment of an original composition.

Chapter Nineteen. **Other Chords Containing the Seventh and Sixth Tones of the Scale Simultaneously**

23 Step One
24 Step Two
25 Step Three. Including assignment of an original composition.

Chapter Twenty. **Borrowed Chords**

26 Step One
27 Step Two
28 Step Three
29 Step Four
30 Steps Five and Six. Including assignment of an original composition.

ADDITIONAL ILLUSTRATIVE MATERIAL FROM MENDELSSOHN'S "SONGS WITHOUT WORDS"

Additional material to illustrate the topics of the course and also for assignment as harmonic analysis will frequently be highly desirable. We suggest as easily available and practicable Mendelssohn's "Songs without Words." A list of readily recognized progressions, topically arranged, is given below. The "Songs without Words" are numbered in accordance with the Schirmer edition.

Chapter One. **The Tonic Triad**
No. 28, measures 1–3
No. 29, measures 1–3
No. 49, measures 7–8
Chapter Two. **The Dominant Triad**
Step One, 8–7–8
No. 41, measure 2
Step Three, 5–5–5
No. 41, measure 1
Chapter Five. **The Minor Mode**
No. 27, the beginning
Chapter Six. **The Minor Mode**
Step One, Derived Harmonic Minor Scale
No. 17, measure 49
Step Two, The Dominant Chord in Minor
No. 27, measures 2–3
No. 27, measure 4
Step Four, **The Progression iv-vin Minor**
No. 43, measures 21–22
Chapter Nine. **Non-Harmonic Tones**
Step One, Passing Tones
No. 7, measure 2
No. 24, measure 13
No. 47, measure 1
No. 40, measure 34
No. 20, measure 1
No. 44, the beginning
Step Two, Auxiliary Tones
No. 40, measures 35–36
No. 45, in various places
No. 47, measure 2
No. 2, measures 72–74

Step Three, Appoggiaturas
No. 46, measures 33–39
No. 34, measures 92–94
No. 36, measures 105–107
No. 46, measures 21–22
Step Four, Suspensions
No. 20, measure 20
No. 40, measure 30
No. 42, measure 16
No. 44, measure 23
No. 48, measure 18
No. 25, measure 39
No. 40, measure 31
Step Five, Anticipation
No. 39, measure 2
Step Six, Miscellaneous Non-Harmonic Tones
No. 28, measure 3
No. 27, measures 25–26
No. 27, measures 27–28
No. 45, measures 17–24
No. 45, measures 9–10
Step Seven, Further Study of Non-Harmonic Tones, Double Suspension
No. 35, measure 33
No. 47, measure 22
Step Eight, Non-Harmonic Tones in Minor
No. 23, measure 61
No. 10, measure 4
No. 21, measure 102
No. 35, measure 12
Chapter Eleven. **The Dominant Seventh Chord**
Step Two, Cadences where V7 follows I^6_4
No. 9, measure 2
No. 26, measure 40
Step Three, Using the Common Tone in the Progression V7–I
No. 37, measure 13
No. 41, measure 4
Chapter Twelve. **Inversions of the Tonic Triad**
No. 45, measure 61
No. 36, measures 1–2
No. 48, measure 3
Chapter Thirteen. **Inversions of the Dominant and Subdominant Triads**
Step One, First Inversions of V and IV
No. 13, measure 8
No. 35, measure 5
No. 47, measure 35
No. 13, measure 8
No. 28, measure 4
No. 43, measure 22
No. 44, measure 2
Step Two, The Second Inversion of the Dominant Chord
No. 22, measure 1
Step Three, The Second Inversion of the Subdominant Triad
No. 48, measure 1
No. 15, measure 9
No. 43, measure 25
No. 45, measure 63
No. 49, measure 9
Chapter Fourteen. **Inversions of the Dominant Seventh Chord**
No. 36, measure 4
No. 14, measure 2
No. 32, measure 11
No. 35, measure 27
No. 40, measure 3
No. 42, measures 67–68
No. 45, measure 5
No. 45, measure 49
No. 46, measure 35
No. 47, measure 51
No. 36, measure 3
No. 37, measure 4
No. 41, measure 5
No. 21, measure 37
No. 40, measure 2
No. 45, measure 6
No. 47, measure 53
No. 41, measure 5
No. 14, measure 50
No. 26, measure 44
No. 40, measure 13
No. 42, measure 9
No. 44, measure 1
No. 45, measure 50
Chapter Fifteen. **Non-Harmonic Tones in the Bass and Inner Voices**
Step One, Non-Harmonic Tones in the Bass
No. 17, measure 1
No. 39, measure 3
No. 47, measures 19–20

No. 49, measure 3
No. 2, measures 76–78
No. 45 in various places
No. 12, measures 1–10
No. 18, measure 2
No. 26, measures 1–4
No. 31, measures 1–2
No. 33, measures 44 to end
No. 34, measure 3
No. 34, measures 80–88
No. 35, measures 1–5
No. 38, measure 22
No. 42, measures 54-57
No. 43, measures 15–17
No. 43, measures 19–20
No. 43, measures 38 to end
No. 45, measures 9–10
No. 45, measures 17–24
No. 45, measures 28–31
No. 45, measures 55–59
No. 48, measure 1
No. 48, measures 15–16
No. 48, measures 25–26
No. 48, measures 29 to end
No. 49, measures 43–47
No. 23, measure 29
No. 23, measure 31
Step Two, Non-Harmonic Tones in the Inner Voices
No. 11, in various places
No. 15, measure 20
No. 32, measure 32
No. 35, measure 6
No. 35, measure 7
No. 44, beginning
No. 47, measures 19–20
No. 2, measures 29–31
No. 2, measures 33–39
No. 5, measure 1
No. 11, in various places
No. 24, in various places
No. 38, measure 34
No. 45, in various places
No. 4, measures 13–15
No. 16, measure 6
No. 23, measures 47–51
No. 33, measure 13
No. 33, measure 17
No. 35, measures 14–18
No. 38, measures 26–29
No. 41, measures 12–14
No. 41, measures 16–18
No. 41, measures 25–27
No. 44, measures 8–10
No. 44, measures 16–18
No. 44, measure 20
No. 44, measures 24–26
No. 47, measures 66–72
No. 44, measure 29
No. 14, measure 42
No. 37, measure 5
No. 20, measure 31
No. 38, measure 38
No. 47, measure 22
No. 49, measure 6
No. 49, measure 53
No. 36, measure 112
Chapter Sixteen. **Secondary, or Substitute Triads**
Step One, The Triad on the Second Degree of the Scale (ii)
No. 48, measure 17
Step Two, The Triad on the Sixth Degree of the Scale (vi)
No. 32, beginning
Step Three, The Triad on the Third Degree of the Scale (iii)
No. 44, measure 22
Step Five, Secondary Triads in Minor Keys
No. 20, measure 18
No. 21, measure 6
No. 43, measure 22
No. 14, measure 33
No. 40, measure 7
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Step Two, Modulations to Other Keys by Means of a Common Chord
No. 48, measure 5
Step Three, Changes of Key Without Modulating Passages
No. 18, measure 14
No. 23, measure 15
No. 34, measures 8–10
No. 49, measure 23
No. 36, measures 16–21
No. 37, measures 14–17
No. 48, measure 11
Chapter Eighteen. **The Seventh Chord on the Second Degree of the Scale**

Step One, In the Fundamental Position, Major
No. 49, measure 5
Step Three, Inversions of the ii7 Chord
No. 6, measure 28
No. 32, measure 3
No. 26, measures 11–12
No. 44, measure 3
No. 3, measures 57–60
Step Four, The Seventh Chord on the Second Degree of the Scale Preceded by the Triad on the Sixth Degree of the Scale
No. 21, measure 7
Chapter Nineteen. **Chords Containing the Seventh and Sixth Tones of the Scale Simultaneously**
Step One, The Dominant Ninth Chord
No. 48, measure 4
No. 17, measure 5
No. 22, measure 10
No. 47, measure 21
Step Three, The Seventh Chord on the Leading Tone
No. 20, measure 17
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No. 15, measure 56
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No. 47, measure 63
No. 49, measure 17
Step Two, the Seventh Chord on the Second Degree Borrowed from the Tonic Minor Key
No. 4, measures 23–24
No. 49, measure 52
Step Three, The Dominant Seventh Chord Borrowed from the Dominant Key
No. 1, measure 35
No. 24, measure 46
No. 28, measure 30
No. 31, measure 10
No. 41, measures 29–30
No. 42, measure 60
No. 44, measure 26
No. 45, measure 7
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Types of Modulation

1- Common tone acts as a fu
dominant modulation + one of t
old key goes to I_6 of the new key. Thou
common tone as 2 first. ($I\ I_{6\ 4}\ V^7\ I$)

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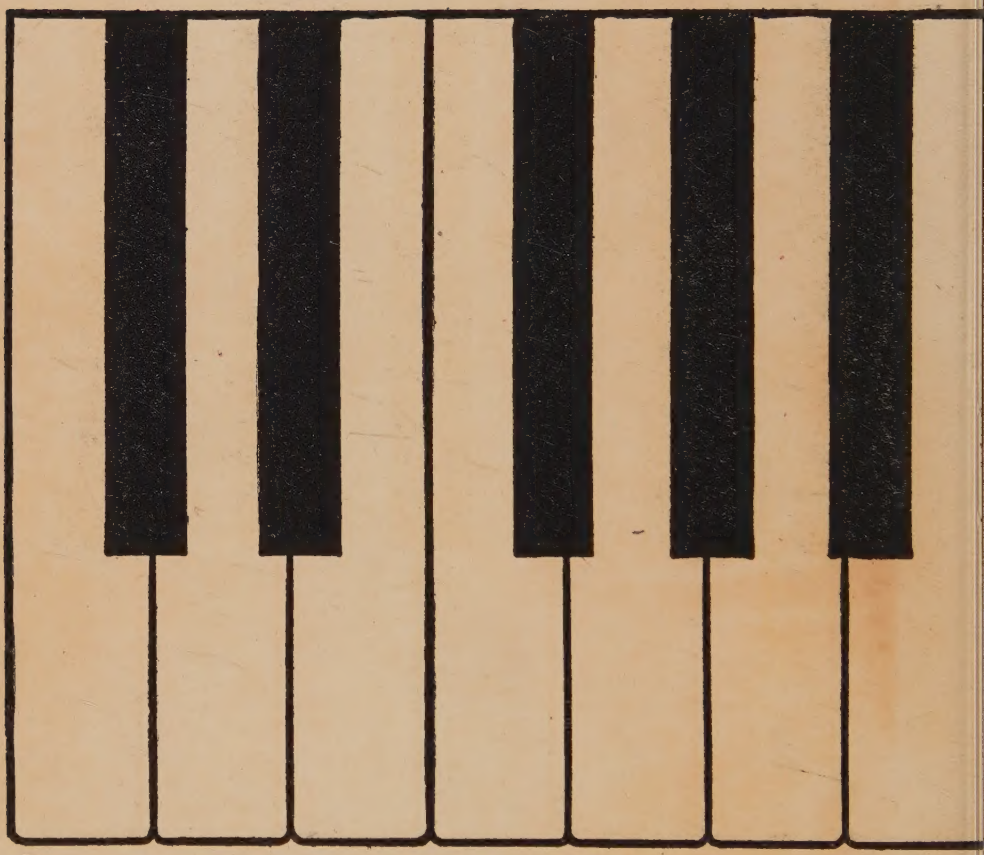
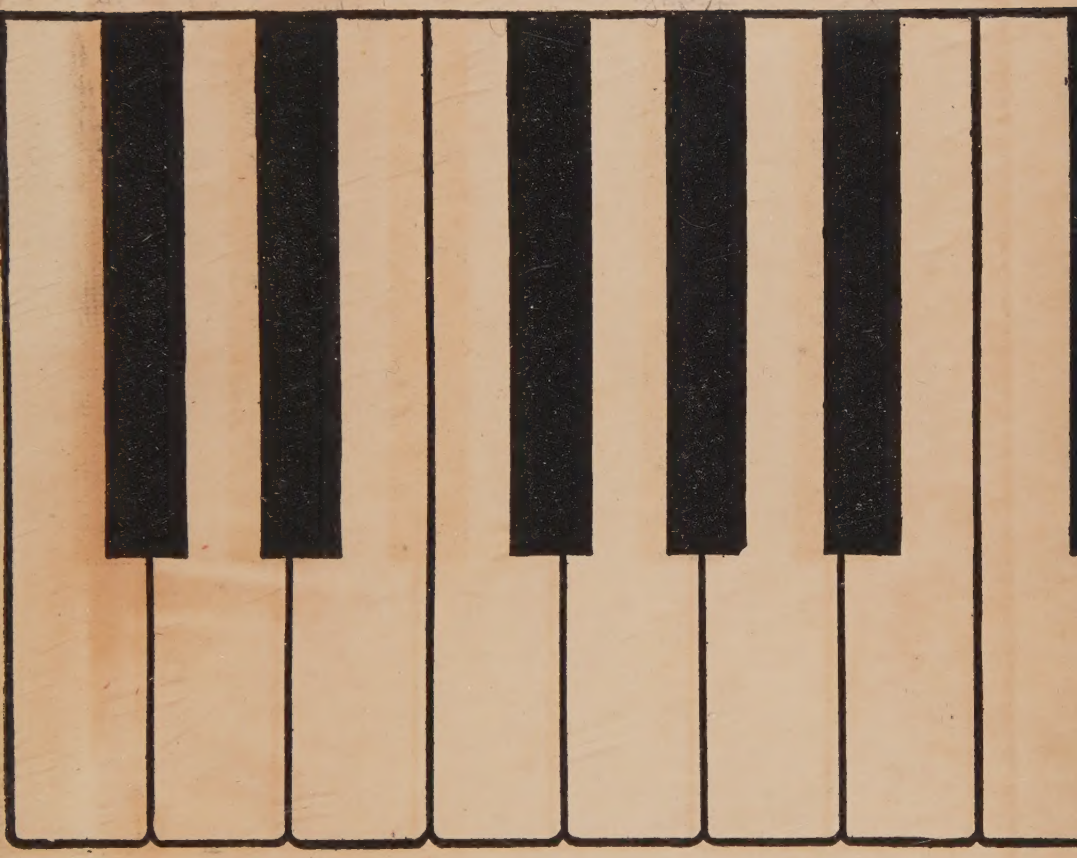


KEYBOARD (TWO OCTAVES)



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